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- Cloting Our Favorite Reporter
- V rses of the Week
- T e Pursuit of Property
- Good Philosophy: Pass It On
- Words of Wisdom

Story of the Week

Good story for toastmasters is the tale of the peerless housemaid who, tho gh unmarried, became pregnant.

The father of the unborn child had skipped town, but the wronged gal's employer told her not to worry about a thing.

We'll adopt the baby," she comforted, "and you can stay on right here with us."

Two years later the maid again got into trouble. Loath to lose her services, her employers adopted this second child, also.

It wasn't long before the maid showed signs of restlessness and pregnancy, and again announced she was quitting.

"Merciful heavens, Bridget, aren't we treating you well?" the lady of the house tugged at the maid's heartstrings. "What more could we have done for you?"

"Oh, you're O. K. But the job's gettin' too hard. I jist ain't gonna work for no family what's got two childern.

Gags of the Week

Bill loved Barbara. He'd do anything for her, he vouched-even go shopping with her. So she took him to the milliners, to the furriers, to the jewelers, and (eventually) to the cleaners.

Now that a method has been developed for canning and shipping live lobsters, inland dwellers may look forward each Friday to their postal cod.

Just about the time Aunt Ada cures her husband of swearing, it's time to make out another income tax report.

Quotes of the Week

"It cannot be said that the American people democratically select their President until the American people democratically select their presidential nominees.

"Today the presidential nominations of both parties are accomplished by a combination of accident, pressure, prestige, guile, conspiracy, balloting."-ROSCOE popular DRUMMOND, Christian Science Moni-

"Our huge national debt may never be wiped out . . . We have insisted on a self-indulgent course and insisted on staying fat on stolen sweets-the reserves drained from the future."—Dr. EDWIN G. NOURSE.

'The merchants will manage commerce the better, the more they are left free to manage for themselves."-THOMAS JEFFERSON.

"Women are not sufficiently represented in politics or government. If polities is the art of governmentand it is-and if government is public house eeping-and it is-then women's place, quite logically, is in politics."-MARY DONLON.

Have patience, and the mulberry leaf "ill become satin." - Spanish

e way some of the generals are treing some of the admirals these suggests that the generals think can walk on water."-Changing

he sense of being perfectly wellsed gives a feeling of inward tra quility which religion is powerto bestow."-EMERSON.

The habit of reading is the only en syment I know in which there is alloy. It lasts when all other pleasures fade. It will be there to support you when all other resources (Concluded on Page 12, Column 1)

ISSUED EVERY MONDAY AT 450 W. FORT ST., DETROIT 26, MICHIGAN. ESTABLISHED 1920 BRAR



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Retailer-Wholesaler Margins Protected

Kelvinator, Cory See No Rollbacks Under CPR 22

DETROIT - Manufacturers of major appliances last week welcomed the news that they now have until July 2 to file their ceiling prices under Ceiling Price Regulation 22.

Though this will give them more time to figure their prices, indications are that there will be no rollbacks. Some manufacturers have already indicated that their prices are below

the ceilings and could be raised. Charles T. Lawson, vice president in charge of Kelvinator sales, stated:

"Current studies of our production costs now being made in connection with CPR 22 indicate plainly that not only will no Kelvinator price rollbacks be required, but that moderate price increases are fully justified by the increased costs."

J. W. Alsdorf, president of Cory Corp., declared: "This extension comes as much needed relief to us, as the task of refiguring our prices under this order is gigantic, and we will need most of the time between now and July 2 to do this figuring.

"However, we will continue our price protection policy, as outlined in our letter of May 1, under this regulation for all shipments we have made between April 25 and July 2."

Cut Materials for Consumer Goods

WASHINGTON, D. C., May 31-Rumors continue to persist here that the National Production Authority may soon issue orders putting a definite limit on the number of units of refrigerators, major appliances, automobiles, and other consumer durables that can be produced, but NPA officials themselves indicated that they are sticking with the plan to limit production of consumer durables by limiting the amount of metals that the manufacturers can use for such products.

Late last week Manly Fleischmann, NPA director, told a group of manufacturers who had been hastily summoned to Washington for a parley, (Concluded on Page 4, Column 2)

Donovan, Mulcahey Join Bush Mfg. Co.

WEST HARTFORD, Conn.-Two appointments to the executive staff of Bush Mfg. Co. here have been announced by Cecil Boling, vice president and general manager.

William Donovan, vice president of the Heat-X-Changer Co. of New York will become director of engineering of both Bush and Heat-X-Changer, and James A. Mulcahey, formerly sales engineer for the Cecil (Concluded on Page 4, Column 5)

Rebel, Lindahl Head New Warren Western Office

ATLANTA - Announcement has been made by The Warren Co. here of the opening of western divisional offices and offices for the Export Division in Los Angeles, under the management of Albert Rebel and George R. Lindahl, Jr.

Rebel was for 20 years manager of the International Division of The Super-Cold Corp., and Lindahl was for many years vice president in charge of sales of Super-Cold.

It was also announced that Glendon W. Stephens, formerly assistant (Concluded on Page 25, Column 4)

SR 29 to GCPR Ends Replacement Squeeze

WASHINGTON, D. C.-Wholesalers and retailers of major appliances and other products still subject to the General Ceiling Price Regulation have been granted a measure of relief from "replacement cost squeeze" and will be permitted to adjust their prices after manufacturers have issued new ceilings under CPR 22 and its companion regulations.

Authority to make the changes was granted in Supplementary Regulation 29 to the GCPR, issued recently by the Office of Price Stabilization.

SR 29 points out that during the base period (Dec. 19, 1950 to Jan. 25, 1951) prices were rising so fast that in some instances distributors' and retailers' prices were frozen at levels which do not reflect replacement costs.

Thus, it said, manufacturers have ceiling prices which are based on price increases made late in the base period and are not reflected in resale prices of many of their distributors, some of whom may not have received deliveries during the base period.

This is what the regulation calls 'replacement cost squeeze." Wholesalers and retailers are authorized to adjust for this squeeze by applying the percentage markup that is reflected in their ceiling price records for this commodity to the last invoice received from the supplier prior to May 28.

If no invoice has been received since the one that shows the base period cost, then the first invoice received on or after May 28 may be

The invoice used in determining present net invoice cost must rep-(Concluded on Page 4, Column 3)

Narda Meeting Scheduled For June 25 In Chicago

CHICAGO-Selling, sales promotion, management, and servicing will be reviewed in the light of current conditions during the mid-year meeting of the National Appliance & Radio Dealers Association.

The meeting will be held June 25 at the Hotel Stevens in Chicago. It will be open to both members and non-members of NARDA.

Featured speakers and their subjects have been announced as fol-

Carl V. Haecker, RCA Victor merchandise display manager-"Vitalization"; Benjamin Gross, president of Gross Distributors, Inc., New York City-"Creative Selling"; W. W. Cone, vice president, Krich-New Jersey, Newark—"Operation Trade"; A. L. Scaife, manager of merchandising, Traffic Appliance Department, General Electric Co.-"Merchandising (Concluded on Page 25, Column 3)

Loudon Announces Line Of Household Appliances

MINNEAPOLIS - A new line of home appliances is being introduced by Loudon Mfg. & Sales, Inc. here, it has been announced by R. J. Loudon, president.

The Loudon company has been active for a number of years in the manufacture of a line of automatic ice cube makers and other commercial refrigeration equipment.

The line will include three household refrigerator models, all 9 cu. ft.; three home freezers, in 9-cu, ft., 15cu. ft., and 21-cu. ft. capacities; two washers; an automatic ironer; five electric range and water heater

Number of Models In Westinghouse Line Cut Sharply

MANSFIELD, Ohio-The Westinghouse Electric Appliance Div. has already cut down on the number of models it is producing in the various appliance lines, a company spokesman stated recently.

By doing so, he indicated, the company has been able to maintain a production output about equal to that of last year in the models re-

Westinghouse has reduced its refrigerator line to two "Frost-Free" models, three conventional models, and one apartment house model. The home freezer is in limited production.

The spokesman said that, for Westinghouse, the refrigerator situation is still tight. The company is selling refrigerators as fast as they can be turned out, he added.

Production on the electric range line is cut to the Commander single oven, the Commodore, and the Rancho apartment house range. The Commodore, a low-end range, is retained because of heavy demand in certain areas, he declared.

Laundromat and clothes drier production continue at full strength.

The housewares line is being reduced to a few basic units. These include a roaster, toaster, square waffle baker, two models of irons, electric bed covers, and food mixers.

ASRE Spring Meeting Draws Big Turnout

DETROIT-Attendance records for its mid-year convention were broken when the American Society of Refrigerating Engineers held its 38th Spring Meeting at the Statler hotel here May 27 through 30. Official registration totaled 541.

Major point of interest was in the technical sessions, which covered a wide variety of topics and included a Domestic Refrigerator Engineering Conference on motors for hermetic

In addition, George Romney, vice president of Nash-Kelvinator Corp., gave a well-received outline of today's social and industrial problems in his talk at the welcome luncheon, while George F. Taubeneck, editor and publisher of AIR CONDITIONING & REFRIGERATION NEWS, presented encouraging "off-the-record" views of production and supply problems to be faced in the next 12 months.

There were also inspection trips to the Kelvinator plant, Greenfield Village, the Ford Rouge plant, J. L. Hudson Co., and the annual golf (Concluded on Back Page, Column 1)

Amendments To **Excise Tax Fail** To Bring Relief

Proposals by Commissioner Leave Tax Applying To Sale of Parts To Field

WASHINGTON, D. C .- More confusion was seen developing in the industry over the application of present excise taxes following publication of the text of proposed amendments to regulations pertaining to manufacturers' excise taxes on mechanical refrigerators, home freez-

ers, and components.

It was believed that discussion would center around a new paragraph on application of the tax.

A subsection of this paragraph indicates that the tax would apply in the case of the sale of specified refrigerator components "by the manufacturer thereof to a wholesaler, jobber, dealer, etc., where such wholesaler, jobber, dealer, etc., does not qualify as a manufacturer of refrigerators, refrigerating or cooling apparatus, or quick-freeze units.

Refrigerator components listed include "cabinets, compressors, condensers, condensing units, evapora-tors, expansion units, absorbers, and controls for, or suitable for use as parts of or with, household type refrigerators or quick-freeze units of the type described . . . including in each case parts or accessories therefor sold on or in connection with the sale thereof."

(It was pointed out that prior to final adoption of the proposed amendments, consideration will be given to any data, views, or arguments on them which are submitted in writing to the Commissioner of Internal Revenue on or before June 19.)

Another point of contention may be whether or not "remote-base" condensing units would be exempt from the tax under the proposed changes.

Last fall. Bureau of Internal Revenue officials were said to have admitted that there was a good case for exemption of such units. But there is no distinction made between remote-base units and the flat-base (Concluded on Page 6, Column 1)

Grocers' Show Opens June 9 In Chicago

CHICAGO—The International Food and Fixture Exposition sponsored by the National Association of Retail Grocers in connection with its 52nd annual convention will open Saturday, June 9, at Navy Pier here and continue through Friday, June 15.

A number of displays of commercial refrigerators and refrigerated equipment will be included among the exhibits.

Show hours for the exposition are: Saturday, June 9...1 p.m. to 10 p.m. Sunday, June 10..10 a.m. to 5:30 p.m. Monday, June 11..9 a.m. to 5:30 p.m. Tuesday, June 12..9 a.m. to 4:00 p.m. Wednesday, June 13 9 a.m. to 5:30 p.m.

Thursday, June 14..2 p.m. to 10 p.m. Friday, June 15.....9 a.m. to 2 p.m. All meetings of NARGUS will be held at Navy Pier also. At the Monday morning session there will be a (Concluded on Page 4, Column 2)

Nobody -- BUT Nobody Will Win

Macy's-Gimbels Price-Cutting Battle Reaches Into Some Appliance Lines

NEW YORK CITY-Macy's touched off a local price war in the wake of the recent U. S. Supreme Court decision that retailers who don't sign fair trade pricing agreements are not bound by them.

The big department store started the city-wide battle by marking down the prices of 5,978 brand-name items, including appliances, by an average of 6%. More than 100 of the price cuts were announced in double-page advertisements in New York newspapers.

The Toastmaster, the Sunbeam Mixmaster, and the Lewyt vacuum

cleaner were among the products to get the ax.

Price of the Toastmaster was first reduced by Macy's from \$23 to \$21.59. But as the price slashing spread over the city, the appliance price was reduced until it was \$16.06, a cut of slightly more than 40%. Later, the item was reportedly selling for

Macy's and Gimbels took turns shaving the price of the Lewyt cleaner. When the former cut the price from \$89.95 to \$84.50, Gimbels did likewise. When Macy's then (Concluded on Page 25, Column 1)



REMINGTON PRESIDENT Herbert L. Laube (seated far left) and E. A. Bonneville, vice president in charge of sales, (seated at head of table) go over sales figures and future plans with sectional managers and service managers from various parts of the country when they attended a recent meeting at the Remington plant.

Sharp Rise Shown In Remington Cooler Sales In 1949-50; New Promotion Plans Set

AUBURN, N. Y. - Increase of 321% for 1949-1950 over the preceding year's sales is reported by the Remington Corp., manufacturer of self-contained room air conditioners.

The announcement was made at the opening session of a week-long sales forum held at the company's plant in Auburn, N. Y. An even sharper rise in sales of the company's standard 1/2 to 11/2-hp. units is anticipated for the coming year, according to E. A. Bonneville, Remington vice president in charge of sales, who conducted the meetings.

The sales increase was cited by

519 Memorial Drive, S.E. · Atlanta, Georgia ·

THE WATCHDOG OF THE NATION'S FOOD SUPPLY

demand for "individualized," decentralized units for homes, hotel rooms, and professional offices. Industrial government orders also figured prominently in the sales rise, as did the company's exports to 53 foreign

Participants in the sales session included sectional managers and service managers for the New England, East Central, Southern, South West, and Midwest sales regions, as well as executives of Remington's advertising agency. Sales, promotion, distribution, service, and advertising policies were discussed fully and de-

Self-Serve Refrigerated Units Boost Beer Sales 300% for Liquor Store

CHEYENNE, Wyo .- Sales of refrigerated canned and bottled beer have increased more than 300% during the past two years at D. T. Liquors here.

Credit for the rise is given to special self-service refrigeration unitstwo 12-ft. stainless steel dry bottle boxes which were installed along the interior of the front wall.

Each case is equipped with six sliding, curved stainless steel doors and six compartments. Total capacity of the two units, custom-built for the package store, is 72 cases, according to D. T. Johnson, operator of the store.

"Over-powered" refrigeration compressors in each unit, which combine an increased number of coils with blower-circulated air, is adequate to keep beer at 35° or lower the yearround, Johnson said.

Most important feature of the cases, from a sales-building standpoint, it that they allow customers to serve themselves, Johnson pointed out. In the past, chilled beer was kept in a walk-in box at the rear of the store, necessitating much waste motion and lost time on the part of sales people.

A small thermometer in each box tells the customer the temperature at which the beer is being held. It has been noticed that compartments which are operating at 32° or even lower, sell canned beer more swiftly than those which are a few degrees

Record Catches Catch Tackle Sales

Portable Refrigerated Case To Display **Big Fish Boosts Sportings Goods Volume**

TUMWATER, Wash.—A profitable increase every season in the sale of fishing tackle at Tumwater Hardware Co. here has been traced directly to the use of a portable, refrigerated "display case" in which the store shows record catches.

The case, which is equipped with 34-hp. condensing unit and Thermopane double-glass panels, was developed by Chris Barker, head of the sporting goods department, and Horace F. Heath, proprietor of the

Built at low cost, it can readily accommodate four or five "prizewinning" fish, which are displayed at

Fish are identified with small signs giving the name of the lucky fisherman, where the fish was caught, the type of bait used, weight of the prize, and other such details.

The refrigerator is mounted on casters so it can be moved out on the broad sidewalk in front of the store during the day.

Since the store is located on major highway, leading throug Tumwater into nearby Olympia, th case attracts much attention. As result, the sporting goods depart ment has shown a sales increas month after month, ever since it wes

During the evening hours, the care is pulled around just inside the ma window of the store, and a spotlig is focused on its contents to attra continued attention from passers-1

News of the refrigerated case h s spread through the ranks of northe n Washington sportsmen, so that many sportsmen who have caught ou standingly large game fish will dri e long distances out of their way n order to turn the specimen over o Tumwater Hardware for display.

The case was built by a local refrigeration contractor from spare materials, parts, and some \$50 worth

of plate glass.

Air Conditioners, Water Coolers Listed by NPA As Personal Property

WASHINGTON, D. C .- The National Production Authority has modified its list of motion picture theater equipment, classified as to real and personal property, to be used as a guide in determining the cost of alterations and construction of theaters.

The following items now are classified as personal property rather than real property; unit air conditioners without ducts, chairs, water coolers, and soda fountains.

The list on which these four items formerly appeared as real property was announced at a meeting of the 35-Millimeter Motion Picture Equipment Industry Advisory Committee.

NPA pointed out that the amendment of Order M-4, issued May 3, included a liberalization of construction regulations by providing for an additional exemption.

Temperature, Humidity Control Aid Florist

NEW YORK CITY-Refrigeration and air conditioning equipment is providing the proper temperature and humidity for flowers, customers, and employes at Traendly & Schenck, local wholesale florist.

Flowers are kept healthy in two 2-hp. York refrigerators and, when on display during the day, in an air conditioned showroom.

In the refrigerators, the temperature is just right-not too cold (or the flowers would be ruined) and not too warm (or they would blossom too fast). So is the humidity -to prevent wilting due to dehydration.

In the display room, both flowers and retail buyers are kept from wilting during the eight-hour display period by a model 701 Yorkaire conditioner

Another Yorkaire conditioner, model 350, maintains a comfortable atmosphere for Traendly & Schenck employes in the office quarters.





TWO OUTSTANDING NAMES

Now combined to offer the refrigeration industry the most complete line of compressors and condensing units available.

(Full range of sixes 1/9-15 h.p.)

TECUMSEH PRODUCTS CO.



Plant at Tecumseh, Michigan manufacturing hermetic units from 1/9 H.P. to 3/4 H.P., conventional units from 1/6 H.P. to 1/2 H.P. and conventional compressors from 1/6 H.P. to 1 H.P.

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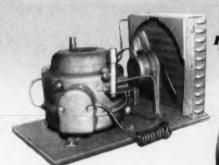


The Tecumseh line of hermetics has long been known in the refrigeration industry for dependable, trouble-free performance. Over 8 million Tecumseh compressors are now in use in the field in freezers, household refrigerators, beverage coolers, water coolers, etc. Three out of four compressors, condensing units and systems purchased by manufacturers in 1950 for incorporation in refrigerating equipment were built by Tecumseh.

UNIVERSAL COOLER DIV.



Plant at Marion, Ohio manufacturing air cooled units in all sizes up to 3 H.P., remote units from 1/2 H.P. to 15 H.P., hermetics from 1/8 H.P. to 1-1/2 H.P.



1/5 h.p. close coupled



15 h.p. water cooled

The Universal Cooler line of compressors and condensing units has been serving the refrigeration industry for 29 years. With a full range of sizes up to 15 H.P., the Universal Cooler Division can supply a condensing unit for any application.

This combination of two outstanding names in the refrigeration industry will now be able to offer manufacturers and jobbers the most complete line, with respect to sizes and models, of conventional compressors and condensing units of any line in the industry.

Complete data on these Tecumseh and Universal Cooler units is available on request. Write today for specifications on the type and size unit you require in your particular application.

TECUMSEH PRODUCTS COMPANY

TECUMSEH, MICH.



UNIVERSAL COOLER DIVISION

MARION, OHIO

BRAND NEW

WILL-COOL OIL COOLER

For Machine Tools



Sold through refrigeration trade

Connect it to your own condensing unit.

MAKE MULTIPLE SALES IN YOUR OWN TERRITORY

Every Machine Shop and Factory Doing High Production Work a Prospect

Eliminates many production problems for your prospects. Specifically designed to control temperature of production machinery. Sizes to accommodate most machine tools.

Inquiries are invited

B. S. WILLIAMS CO., INC. 6 North St. Mt. Vernon 1, N. Y.

JUST ASK US!

Turn to "What's New" page for useful information.

Always Extra Value

KEROTEST MANUFACTURING CO.

SEE

Grocers' Show --

(Concluded from Page 1, Column 5)
panel discussion on "Store Layout
and Stock Arrangement"; at the
Wednesday morning, June 13, session
there will be a panel discussion on
"The Produce Department"; and at
the Wednesday afternoon session
there will be a panel discussion on
"The Meat Department."

Two outstanding American food stores will be completely reproduced on Navy Pier as part of the International Food and Fixture Exposition.

Gromer's of Elgin, Ill., and Loop Super Valu Store of Duluth, Minn., are the large and medium sized stores respectively that will be reproduced exactly as they are now in successful operation.

This is the first time such an extensive project has been undertaken by NARGUS for a convention.

The accurate, painstaking duplication of both stores as to equipment, fixtures, and merchandise will demonstrate in detail to independent food retailers how these two stores are able to do such an outstanding job of merchandising.

of merchandising.
Partners in both stores—Richard
Gromer and Virgil Dock—will be
present the entire week of the exhibit to furnish complete operating
statements of the stores and to discuss their merchandising techniques
with retailers.

They will explain, item by item, their operating costs for personnel, merchandise, rent, light, and heat. They also will tell their reasons for the stores' particular layouts and show samples of their promotion and advertising materials.

Materials Cut--

(Concluded from Page 1, Column 2) that the NPA had no intention of letting consumer durable goods "become a casualty" of the defense production program. However, he warned that "beginning with the third quarter and continuing for perhaps a year and a half, maybe two years, the military program's 'take' of materials will be very substantial."

The probable further reduction in steel, copper, and aluminum use, he indicated, will be as follows:

Steel use will be cut from 80% of base period (first half of 1950) consumption to 70%. Copper use by refrigerator and appliance manufacturers will be dropped from 65% to 60% and aluminum use from 65% to 55% or possibly 50%.

Fleischmann explained that these industries will have to seek their materials on the "free" market and may use all they can get up to the limits set.

He said that "amounts of material we estimate can be made available for consumer durables will be made available. If you can't get it, we want to know about it."

Zimmer Named Curtis Adv. Mgr.

ST. LOUIS—Curtis Mfg. Co. here, producer of saws, pneumatic machinery, air conditioning, and refrigeration equipment, has announced the appointment of Harold L. Zimmer to the post of advertising manager.

Zimmer, formerly with the St. Louis Star Times, has a varied background in advertising, selling, and

nerchandising.

SR 29 --

(Concluded from Page 1, Column 3) resent a typical purchase with respect to terms and quantity.

Only one recalculation of ceiling price to adjust for replacement cost squeeze is permitted. This SR is not intended to provide continuing relief.

However, the regulation also provides that when the manufacturers have put their new ceilings into effect (which should be by July 2) wholesalers and retailers must reflect any decreases and may reflect any increases.

Recalculation of wholesalers' and retailers' ceiling price is to be made by applying the permitted percentage markup (same as that used above) to the new net invoice cost for the article.

SR 29 also contains a provision that permits a manufacturer whose branded products have customarily been sold at wholesale at suggested uniform resale prices to continue to sell that way.

sell that way.

However, the manufacturer must apply to the OPS for permission to set such uniform prices and show that it was his customary practice to sell that way before Jan. 26, 1951.

Wholesalers are permitted to use such prices as soon as they are notified by the manufacturer that these prices have been approved by OPS.

An Example

As an example of how the replacement cost squeeze is eliminated, say a dealer purchased from his supplier on Jan. 10, 1950, a refrigerator at \$200 net invoice cost (less all discounts).

He sold this refrigerator for \$275 during the base period and \$275 became his frozen ceiling price for this model refrigerator.

However, on Jan. 20, the supplier raised his price on this refrigerator to \$220, and \$220 became his ceiling price for this model. Unfortunately the dealer did not buy any refrigerators at this higher price during the base period, which closed on Jan. 25. His purchases since then have been at the higher price.

With a base period cost of \$200 and a ceiling price of \$275, the dealer has a markup of \$75 or (\$75 \div \$200) 37.5%. To adjust his price he applies this 37.5% to his last invoice received prior to May 28, which would bear a net cost of \$220. Thus \$220 \times .375 would give him a markup of \$82.50 or a new ceiling price of \$302.50.

Relief from increases in manufacturers' ceiling prices under new government regulations is figured in exactly the same way. Decreases are figured as follows:

A wholesaler has been buying a refrigerator from a manufacturer at \$150 and selling it to his dealers at \$200.

His percentage markup is $(\$50 \div \$150)$ 33.3%. Under CPR 22, the manufacturer finds this his ceiling price is \$140. The wholesaler then applies his 33.3% markup to \$140 and gets a dollar markup of \$46.62. Thus his ceiling price becomes \$186.62 (\$140 plus \$46.62).



JAMES A. MULCAHEY WILLIAM DONOVA

Bush Appointments-

(Concluded from Page 1, Column 2 Boling Co. becomes sales manage of Bush.

Donovan was formerly with Gibbs & Cox, naval architects and maring engineers of New York, and for the past five years has been associated with the Cecil Boling and Heat-X-Changer companies. He is a graduate of the Webb Institute of Naval Architecture and holds a master degree from the Massachusetts Institute of Technology.

Mulcahey has been connected with the Cecil Boling Co. of New York for the past five years in various sales and engineering capacities. He, also, is a graduate of the Webb Institute of Naval Architecture.

The appointments of Donovan and Mulcahey are part of the program of expansion inaugurated by Bush with the recent announcement of Cecil Boling's election as vice president and general manager.

N.Y. Court Cracks Down On Leaky Gas Appliances

NEW YORK CITY — Magistrate Henri Schwob threatened to jail owners of buildings containing leaky gas appliances unless repairs are made immediately.

The threat was made in Municipal Term Court here as the owner of an 18-family tenement was fined \$250 for maintaining a nuisance by having a leaky gas refrigerator.

The defendant escaped a 10-day workhouse sentence on the condition that all gas appliances in the house be repaired within one week.

It was testified that a Health Department inspector discovered the leaky refrigerator when he visited the tenement last March 26. When the condition of the refrigerator was found worse on a second visit in May, the inspector ordered gas to the apartment shut off immediately, the court was told.

Observed Magistrate Henri Schwob: "It is impossible to minimize the dangerous conditions caused by these leaky gas appliances. If landlords and owners of buildings needing repairs on appliances do not make them immediately, I'll send them to jail."

Hearing in another case involving a leaky refrigerator was adjourned to a later date.



Valves and Fittings.

at No Extra Cost

PITTSBURGH 22, PENNSYLVANIA



Space 540, Furniture Mart, Chicago

BEN-HUR MFG. CO., Dept. AC — 634 E. Keefe Ave., Milwaukee 12, Wiscon in

BEN- FARM and HOME FREEZERS
HEALTHFUL LIVING THROUGH FROZEN FOODS



WSPAPER ADVERTISEMENT run by Besty Stores, Buffalo, tells prospects to save their feet and save their dollars by telenoning for information on refrigerators.

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Buffalo Appliance Outlet Urges Prospects To Phone For 'Best Deal In Town'

BUFFALO-Bestway Stores, operating three appliance outlets here, called a number of refrigerator prospects through the medium of a special "Telephone Sale" promotion.

Residents throughout the Buffalo area interested in trading in their old refrigerator on a new one were invited to call Bestway and see how much they would be offered.

A store spokesman pointed out that the telephone sale idea was aimed at saving customers the trouble of tramping around from one dealer to another in quest of a "best

Bestway used a large newspaper advertisement to launch the promotion and followed up with several similar advertisements.

"Pick up your phone and save \$\$\$\$," said advertising copy. "The best deal in town on refrigeration is as near as your phone. If you think we're kidding, just call VI 2315. Find out how much you save."

The advertisement emphasized that customers with anything to trade in would save even more.

Summer Mart To Reflect Effect of Govt. Controls

CHICAGO-Manufacturers and retailers will have a clearer picture of what to expect in the months following the June 18 to 28 Summer Home Furnishings Market in Chicago than they had in January, believes Wallace O. Ollman, general manager of The Merchandise Mart.

"At the beginning of the year, it was known there would be allocations, priorities, and price controls; they were just beginning. But just how they would affect home furnishing was not clear. Now, the industry knows pretty well where it stands as regards government regulations and the armament program. New facets will constantly develop, but there is a more definite basis for planning," said Ollman.

"Despite popular opinion, sales in home furnishings have been good in stores across the country. Only by comparison with abnormally high sales levels, and with the volume of stocks on hand, were sales 'low' this spring. March sales were exceeded in only four other months—the buying rushes of July-August, 1950, and lary-February, 1951, according to Department of Commerce.

erchandise is expected to be in fair free supply at the June Marthough shortages may develop in the year. Manufacturers and g offices surveyed in The Mart that buyers will be looking ore than the usual number of otional items to increase store and that such items will be an. g the new offerings. They antia large attendance and buying althier levels than in January.



Appliance Men Told That:

Dealers' Problems Are Created by Dealers; Can Best Be Solved by Them

WILMINGTON, Dela. — Appliance dealers themselves can solve their biggest problems because they themselves are responsible for them, Harry B. Price, Jr., vice president of the National Appliance and Radio Dealers Association, indicated re-

Speaking before the Electrical Appliance Dealers of Delaware, he outlined several big dealer problems and pointed out what dealers could do about them.

To solve the problem of too much inventory, he said, stop trying to be the "big dog" and cease buying. "Your only problem," he explained, "is to stay in business and remain in the good graces of your partners, the suppliers, the banks, and your customers.

"Analyze your inventory problems

long it will take to get your stocks in balance with anticipated sales and don't buy until you need merchandise for sales, not anticipated sales."

Warning against buying in anticipation of future shortages and in the hope of making a killing, Price stated, "I can't afford to stock up with merchandise which I believe has reached its height in prices and is due to recede sooner or later. When it does, you can bet it will be in a period of slackening sales.

"If retail sales remain slow, manufacturers will have to reduce prices to move a quantity of merchandise."

Turning to Regulation W, Price declared. "I feel it is a distinct advantage to know that my customers have a 25% equity in the merchandise they have purchased from me because of Regulation W.

RANGES • REFRIGERATORS • DISHWASHERS • DISPOSALLS® • WATER HEATERS

FOOD FREEZERS . AUTOMATIC WASHERS . CLOTHES DRYERS . ROTARY IRONERS . CABINETS

"May I urge that during this

period of high down payments and short maturities you get together with your source of discount and try to work out some plan to eliminate the contingency of having to buy back bad accounts when delinquency rises and you are least able to stand that financial strain.

"The situation deserves the complete cooperation and study of your finance company and bank. It is possible to build reserves and eventually work toward a limited or nonrecourse agreement which builds for permanency.'

Pointing out that the selling of terms has often replaced good sales technique, Price indicated that now was a good time to develop the

Regulation W, he said, has eliminated that large store's credit advantage and all dealers are now working on equal terms.

Other bits of advice offered by Price were: "Keep your name alive and keep your community aware of your store name and a little proud

"Keep trade-ins in near-new condition and make sure your service

TV Show Sponsored by G-E Supply, 60 Dealers

ST. LOUIS-A cooperatively sponsored television show featuring Hotpoint appliances has started over station KSD-TV here and will continue each Thursday for 13 weeks. General Electric Supply Corp., distributor, and some 60 dealers are paying for the show.

The half-hour program is designed to give the housewife ideas she can use in running her own home. All phases of homemaking are included, not only those concerned with the use of appliances, but also such matters as entertaining, picture arrangement, interior decoration, window treatment, furniture and room arrangement, and space using.

There is also a tie-in with the "My Kitchen Contest" of McCall's magazine. Hotpoint dealers will serve as contest headquarters.

To encourage floor traffic a new 'magic Hotpoint word" is specified on each week's program, and a customer who mentions the word gets

HOTPOINT Inc. (A General Electric Affiliate)

5600 West Taylor Street, Chicago 44, Illineis



Proposed Excise Tax Changes--

(Concluded from Page 1, Column 5) type which are obviously designed for self-contained cabinets or fixtures.

Questioned on this point, an official of the bureau said exemption would be a matter to be determined by individual rulings.

The official was also queried on the matter of open-type, belt-driven condensing units, since these units are not specifically mentioned either. He said the previous ruling that sales by manufacturers of this kind of unit are not taxable still stands. Among other things, the proposed

amendments also:

1. Provide that a manufacturer of specified refrigerator components can establish the right to exemption from tax on sales to a manufacturer of refrigerators, refrigerating or cooling apparatus, or quick-freeze units by obtaining from the purchaser, a properly executed exemption certificate. The form of the certificate to be followed is spelled out.

2. Define "household type units for the quick freezing or frozen storage of food" as including "units solely for the quick freezing of foods or solely for the storage of frozen foods and combination freezer and storage units for rural or urban home use. Units designed and constructed solely for commercial, industrial, or scientific purposes are not taxable."

Text of Proposed Amendment

Extracts from text of the proposed amendments follow:

"Par. 15. Immediately preceding § 316.70, there is inserted the following:
"Sec. 606. IMPOSITION OF TAX
(Revunits. ON QUICK-FREEZE UNITS (Rev-

enue Act of 1950, approved September 23, 1950). "So much of section 3405 (manufacturers' excise tax on mechanical refrigerators and air-conditioning units) as precedes sub-section (c) is

hereby amended to read as follows: "Sec. 3405. TAX ON MECHANI-CAL REFRIGERATORS. QUICK-FREEZE UNITS, AND SELF-CON-AIR - CONDITIONING TAINED UNITS.

"There shall be imposed on the following articles (including in each case parts or accessories therefor sold on or in connection with the sale thereof) sold by the manufacturer, producer, or importer a tax equivalent to 10 per centum of the price for which so sold:

"(a) Refrigerators and quickfreeze units. Household type refrigerators (for single or multiple cabinet installations) having, or being primarily designed for use with, a mechanical refrigerating unit operated by electricity, gas, kerosene, or gasoline; household type units for the quick freezing or frozen storage of foods, operated by electricity, gas, kerosene, or gasoline; combinations of such household type refrigerators and units.

"(b) Refrigerating and freezing apparatus. Cabinets, compressors, condensers condensing units, evaporators, expansion units, absorbers, and controls (hereinafter referred to as 'refrigerator components') for, or suitable for use as parts of or with household type refrigerators or quick-freeze units of the kind described in sub-section (a), except when sold as component parts of complete refrigerators, refrigerating or cooling apparatus, or quick-freeze

"Under regulations prescribed by the Secretary, the tax under this sub-section shall not apply in the case of sales of any such refrigerator components by the manufacturer, producer, or importer to a manufacturer or producer of refrigerators, refrigerating or cooling apparatus, or quick-freeze units.

"If any such refrigerator components are resold by such vendee otherwise than on or in connection with, or with the sale of, complete refrigerators, refrigerating or cooling apparatus, or quick-freeze units, manufactured or produced by such vendee, then for the purposes of this section the vendee shall be considered the manufacturer or producer of the refrigerator components so resold.

Section 316.70, "Par. 16. amended by Treasury Decision 5696, approved April 7, 1949, is further amended as follows: .

"(2) The term 'household type refrigerator' includes refrigerators for single or multiple cabinet installations, which (i) are designed for domestic use, (ii) are arranged to provide refrigerated storage space for the preservation of food products or low temperature space for making ice cubes and frozen desserts, (iii) have a net storage space not exceeding 14 cu. ft., and (iv) have, or are primarily designed for use with, a mechanical refrigerator unit operated by electricity, gas, kerosene, or gasoline.

"(3) The term 'household type units for the quick freezing or frozen

storage of food' includes units solely for the quick freezing of foods or solely for the storage of frozen foods and combination freezer and storage units for rural or urban home use. Units designed and constructed solely for commercial, industrial, or scientific purposes are not taxable.

"(4) A manufacturer of household type refrigerators or household type units for the quick freezing or frozen storage of foods taxable under section 3405 (a) or other refrigerators or refrigerating or cooling apparatus may purchase tax free for use as a component in the manufacture of such articles any of the refrigerating and freezing apparatus specified in section 3405 (b). (See § 316.71.)

"However, if any of the refrigerating or freezing apparatus specified in section 3405 (b) is purchased tax paid and used as a component in the manufacture of a household type refrigerator or household type unit for the quick freezing or frozen storage of foods taxable under section 3405 (a), as amended, the manufacturer of such refrigerator or unit may be allowed a credit to the extent of the tax paid on the refrigerating or freezing apparatus so used as a component. (See § 316.204.)

"(5) The tax does not apply to refrigerator cabinets which are primarily designed for use without a mechanical refrigerating unit.

"(6) Combinations of household type units for the quick freezing or frozen storage of foods and household type refrigerators are taxable only if the normal temperature refrigerator portion has a net storage space not exceeding 14 cu. ft.

"Par. 17. Section 316.71, amended by Treasury Decision 5189, approved November 30, 1942, is further amended as follows:

"(B) By adding at the end thereof the following new paragraph:

"(c) For the period beginning November 1, 1950. Sub-section (b) of section 3405, as amended by section 606 of the Revenue Act of 1950, imposes a tax on sales by the manufacturer of cabinets, compressors, condensers, condensing units, evaporators, expansion units, absorbers, and controls for, or suitable for use as parts of or with, household type refrigerators or quick-freeze units of the type described in section 3405 (a) of the Internal Revenue Code, as amended by section 606 of the Revenue Act of 1950, including in each case parts or accessories therefor sold on or in connection with the sale thereof.

"Sales of such refrigerating apparatus as component parts of complete refrigerators, household type units for the quick freezing or storage of foods, or refrigerating or cooling apparatus are not subject to

"Par. 18. Section 316.72 . . . and § 316.73 . . . are renumbered sections 316.73 and 316.74, respectively, and a new § 316.72 is inserted immediately following § 316.71 to read as follows

"§ 316.72 Application of tax. (a) Where a household type refrigerator or quick-freeze unit is sold, the tax is based upon the sale price of the assembly, which includes all components, and all parts and accessories therefor, sold on or in connection with, or with the sale of, the refrigerator or quick-freeze unit.

"(b) If a manufacturer of household type refrigerators or quick-freeze units buys refrigerator components upon which tax has been paid he may take credit against the frigerators. (See § 316.204.)

"To establish the right to exempmanufacturer of the refrigerator obtain from the purchaser a properly executed exemption certificate substantially in the form prescribed in

"(e) Under section 3405 (b) of the Code a manufacturer who purchases refrigerator component tax free under an exemption certificate is considered the manufacturer of the component so purchased and is liable for the tax on the resale thereo unless (1) such component is resold on or in connection with, or with the sale of a complete refrigerator, refrigerating or cooling apparatus, or quick-freeze unit manufactured or produced by his or (2) such resale s otherwise exempt from tax, such as sale for export, sale to other manufacturers of refrigerating equip-

"(f) Following is the form of exemption certificate which will be acceptable for purposes of this section and which must be adhered to in substance:

EXEMPTION CERTIFICATE

(Date) "(To support tax free sales under section 3405 (b) of the Interna Revenue Code, as amended by sec tion 606 of the Revenue Act of 1950.

"The undersigned hereby certifies that he is a manufacturer or producer of refrigerators, refrigerating and cooling apparatus, or quick freeze units and that the refrigera tor components specified in the ac companying order No., or pur chased within the period from to (such period shall not ex ceed six months) are purchased tax free by virtue of the provisions of section 3405 (b) of the Internal Revenue Code.

"It is understood that if any of the refrigerator components purchased under this certificate are resold by the undersigned otherwise than on or in connection with or with the sale of complete refrigerators, refrigerating or cooling apparatus, or quickfreeze units manufactured or produced by him, the undersigned is considered the manufacturer or producer of the articles purchased hereunder and unless such resale is otherwise exempt must pay the tax on his sales of such refrigerator components, as provided in section 3405 (b) of the Internal Revenue Code. Thus, the undersigned is liable for tax on all resales of such refrigerator components for repair or replacement purposes on either household or commercial refrigeration equipment.

"It is further understood that the fraudulent use of this certificate to secure exemption will subject the undersigned and all guilty parties to a fine of not more than \$10,000, or to imprisonment of not more than five years or both, together with cost of prosecution.

Name Address

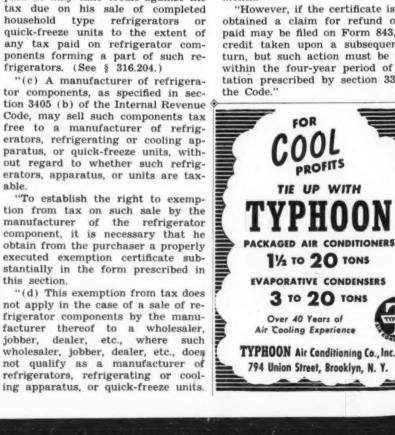
"(g) If it is impractical to furnish a separate exemption certificate for each order, a certificate covering all orders between given dates (such period not to exceed six months) will be acceptable.

"(h) The certificate, with supporting orders, invoices, etc., must be maintained by the manufacturer, producer, or importer of the refrigerator components for a period of not less than four years from the date on which the tax free sale is made.

"(i) Where the certificate is not obtained prior to the time the manufacturer thereof is required to file a return covering taxes due for the month during which the sale was made he should include the tax on such sale in his return for that month.

"However, if the certificate is later obtained a claim for refund of tax paid may be filed on Form 843, or a credit taken upon a subsequent return, but such action must be taken within the four-year period of limitation prescribed by section 3313 of





Scripps-Howard To Aid IAED In Ad Rate Test

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ATLANTIC CITY-Vernon Brooks. rector of the general advertising partment of Scripps-Howard newspers, told the National Association Electrical Distributors here that ripps-Howard would cooperate th the NAED in a test to find a lution to the problem of "national" "local" newspaper advertising

The association has been fighting at it calls the "uneconomic and criminatory" practice of local wspapers of "charging local elec-al appliance distributors and lers national rates for purely local perative newspaper advertisents . . . while at the same time g inting lower local rates to coming regional and national retail chain organizations."

Brooks indicated that possible solutions to the rate problem would be tested in a selected city. An apphance distributor and a newspaper in that city would be chosen to take part in the test.

Discussing the newspapers' side of the controversy, Brooks explained that the present system of determining rates was developed over a period of many years. This system, he said. is the result of the publisher's effort to find a happy medium in seeking maximum national and local adver-

Brooks conceded, however, that marketing conditions may have

Army Surveys 8 Inactive Camps for Future Use

WASHINGTON, D. C .- The Army announced that it has reactivated the XVIII Airborne Corps at Fort Bragg, N. C., and that it will survey eight inactive camps in six states for possible future use.

At the same time, the Air Force revealed that it will reactivate Bryan Air Force Base in Texas early this summer as an advanced single-engine jet training school, establish a Technical Training Air Force at Biloxi, Miss., and open an indoctrination center at Shoemaker Military Reservation, Pleasanton, Calif.

Inactive Army installations to be surveyed are Camp Shelby, Miss.; Camp Gruber, Okla.; Camp Joseph T. Robinson, Ark.; Camp Bowie, Texas; Camp Blanding, Fla.; Camp White, Oregon; Camp McCain, Miss.; and Camp Swift, Texas.

Sale of Refrigerators Booms In South America

MIAMI, Fla. - Electric refrigerators are streaming into Latin American markets from Miami.

Development of a vast number of hydro-electric plants and low-cost housing projects following a general postwar economic improvement in many nations account for the new

One airline (Ransa) under contract to General Electric ships as many as 1,500 refrigerators a month to Venezuela alone.

nezuelan dealers under the ar rangement are able to use the air-Miami warehouse to reduce investments and speed deliveries.

As a result, dealers need only demonstrators in stock. They avoid paying customs duty and transportation until the refrigerator is sold. ery is made within 24 hours the order is received.

ports indicate commercial refrig ation with a change in the eatnabits of Latin Americans is ving the flow of home units.

e Colombian airline (SAM) is ing on a plan for refrigerated louses throughout the country ef may be aged.

am Will Coordinate ertising at Liquid Carbonic

ICAGO-W. A. Brown, Jr., vice dent and general manager of Liquid Carbonic Corp. here, anced the appointment of John A. Gram, Jr. as coordinator of adsing.

e position replaces the office of tising manager held by Bernard J. Os up until the time of his recent

M-4 Restricts Structures for **Consumer Goods Distribution**

WASHINGTON, D. C .- The National Production Authority recently emphasized that specific NPA authorization is required for any building, structure, or project to be used for, or in connection with the storage, distribution, display, or sale of consumer goods.

This includes, the agency said, 12tail stores, shopping centers, wholesale establishments, drugstores, soda fountains, and florist shops,

Restrictions on this type of construction are in NPA order M-4.

Mayflower Distributes Sunroc

ST. LOUIS-M. B. Lasky, president of the Mayflower Sales Co. here, announced that the company has been appointed distributor for the Sunroc Co. in parts of Kansas, Missouri, and Illinois.

With branches in St. Louis, Kansas City, Mo., and Wichita, Kans., the Mayflower Sales Co. will market Sunroc equipment.

To Boost Lagging Market

CHICAGO-"With materials allocations and appliance dealers currently troubled with heavier inventories than they have experienced since the war, the second quarter does not look as good as the first,' Raymond J. Hurley, chairman of the board, Thor Corp., told stockholders at the company's recent annual meet-

Hurley reported earnings of \$1.06 per share for the first quarter, but said that they probably would not be so high for the second quarter.

He emphasized that Thor's policy can be expressed in one word; sell.

"We shall continue our aggressive sales policy no matter what the future brings," he asserted, "because we are convinced that this, and this alone, is the only assurance of suc-

"With this as our policy, we plan new products before the year is out." to introduce one, and possibly two,

Thor Plans New Products Soft Drink Sales Boosted and Teen Agers Kept by Installing Self-Serve Meat Case

DENVER-Installing a self-service refrigerated meat case near the end of the soda fountain rail has not only stepped up soft drink and ice cream sales for the South High Dairy here but also solved a serious customer problem.

Mrs. Brenda Rhodes, owner of the soda fountain, designed her store to appeal to college, high school, and elementary school students in the neighborhood, setting up a second-floor "fountain room" with a juke box and 12 booths. The 12-stool fountain on the first floor, which serves both hot short order foods and fountain drinks, takes care of the "overflow" during the after-school hours.

Waves of youngsters, arriving in groups of 15 or more at a time, posed a difficult problem, since all could not be seated at the same time. As a result many moved on to neighboring drugstores.

The ideal solution has been found

in displaying carbonated drinks, ice cream cups, popsicles, and other items in the meat case. Now, if there are no stools available, the teenage customer can select his favorite bottled drink from the refrigerated case and put the payment on the top of the case, and open the bottle with an opener installed at the side. He can then enjoy the bottled drink standing up, or take it upstairs, to the fountain mezzanine, as he

In this way, there are no "walkouts" and the refrigerated case sells as many as a dozen cases of bottled drinks a day, without extra strain on fountain personnel.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

"Our Way of Doing Business Demanded a Frigidaire Franchise!"

Guadalupe Refrigeration Corporation is a new business-founded in Seguin, Texas, in 1945. It is also a highly successful and fast-growing business - one which in 1950 did 12 times its first-year volume.

Behind that rapid growth is a policy that T. J. Reynolds, the manager, expresses like this: "Located as we are, we have plenty of competition. We expect it and try to overcome it by better products, better service and better facilities.

"Because of this policy, we were delighted with the offer of a Frigidaire Commercial Refrigeration and Air Conditioning Franchise. We accepted it in January of '48 and it has proved one of our biggest helps in the successful operation of our business.

"It has given us a complete line of high-quality products that has enabled us to get business we previously missed. It has given us a dependable and willing source of engineering know-how that we've called on time and again. And it has supplied us both dependable service parts and expert information on their use.

"Our Frigidaire Franchise has - in other words - helped us greatly to carry out a policy that has been increasingly successful. Carrying out that policy has taken a lot of hard work and long hours - but it has also provided a lot of satisfaction.

"We recommend it."

== FRIGIDAIRE

Over 400 Frigidaire refrigeration and air conditioning products - most complete line in the industry



Company manager T. J. Reynolds phones a Frigidaire user for an appointment to talk over some new equipment. He says, "Much of our selling is repeat business to customers sold in the past. Users of Frigidaire equipment make up a big portion of these - and some equipment in daily use dates back to the 1920's."



Salesman Glenn Follett points out some of the important features of a Frigidaire Display Case to Mr. J. Knodel, local food market owner. Guadalupe has two regular salesmen, but-says Mr. Reynolds-"despite other work that must be done, all of us here sell where, when, and as we can."



The handsome concrete-and-tile building which houses Guadalupe Refrigeration Corporation provides total floor space of 6,600 sq. ft. Asphalt tile floors and plenty of good lighting aid in the effective use of the 3,000 sq. ft. display area. Additional storage space is now being added.



Service department consists of a well-equipped shop, three servicemen, and three trucks. Every piece of equipment handled by Guadalupe Refrigeration-whether new, used or repaired-is given a thorough going-over in the shop and is testoperated there before delivery to the customer.

TEXT OF CPR 34

Which Takes Charges for Service Operations Out From Under General Ceiling Price Regulation

Sec. 1. What this regulation does.

This regulation removes most services from the coverage of the General Ceiling price Regulation (GCPR) and brings them under this regulation. This regulation in general establishes the ceiling price of most services at the levels prevailing in the period Dec. 19, 1950, to Jan. 25, 1951, inclusive.

Sec. 3. Prohibitions.

(a) On and after May 16, 1951, regardless of any contract or other obligations.

less of any contract or other obligation:

(1) You may not sell any service covered by this regulation at a price higher than your ceiling price.

(2) No person in the course of trade or business may buy any service covered by this regulation at a price higher than the

ceiling price.
Of course, you may charge lower prices than your ceiling prices at any time.
(b) Once you have reported your ceiling price or a proposed ceiling price for a service as required by this regulation, you may not thereafter redetermine it. A purely arithmetical error may, however, be corrected, but the correction must be reported to the Director of Price Stabili-zation, Washington 25, D. C.

Sec. 4. Prices previously established.

(a) This regulation supersedes the GCPR in so far as the GCPR dealt with

services now covered by this regulation.

(b) Since this regulation keeps certain of the basic pricing provisions of the GCPR, many of your ceiling prices under this regulation will be the same as those this regulation will be the same as those you properly established under the GCPR.

(c) In addition all prices established under section 6 or section 7 of the GCPR remain in effect under this regulation.

Sec. 5. General pricing provisions.

(a) In determining your ceiling price (which you must report in the manner provided by section 18 of this regulation) use the first of the following provisions which applies to you. Your ceiling price

(1) The highest price at which you supplied the same service during the "base period" (Dec. 19, 1950, to Jan. 25, 1951, inclusive) to a purchaser of the same class. (Be sure to read the definition of "purchaser of the same class" in section 27 (a) (11) of this regulation.

If, however, in the base period you did not have a flat price for the service, but did have a rate or a pricing method to determine your price, you may continue to use your highest base period rate or pricing method to determine your ceiling price for the same service, to a purchaser of the same class.

(2) If you did not actually deliver the service in the base period, then the highest price at which you offered in writing to supply the same service for delivery in the base period to a purchaser of the same class

If, however, in the base period you did not offer in writing to supply that service not offer in writing to supply that service to that class of purchaser upon the basis of a flat price, but did have a rate or pricing method upon the basis of which you could have supplied that service to that class of purchaser, then the price resulting from the application of your highest base period rate or pricing method which would, by your usual trade practice, have been used by you had you supplied the service in the base period.

(3) The ceiling price of your closest

(3) The ceiling price of your closest competitor for the same service to a purchaser of the same class, if you did not actually supply it or offer it for supply in the base period to any purchaser.

However, you may not take your closest competitor's ceiling price if such price is based on his offering price. The term "ceiling price" as used in this paragraph and in sections 6 and 7 of this regulation and in sections 6 and 7 of this regulation also includes a ceiling rate or pricing method.

If you are a new seller first making sales after the effective date of this regu-lation, or a seller of a new service first

sold by you after the effective date of this regulation, you will comply with section 6 of this regulation.

(b) In the use of a rate or pricing method you may not charge more for each factor of the rate or pricing method than the highest price you charged for such factor in the base period.

such factor in the base period.

For example, you operate an automobile repair shop, and you do not have a fixed flat price for body repair work, but make a labor charge of \$3 per hour plus the price of any parts supplied. You may not now charge more than \$3 per hour for your labor charge even though you are paying your mechanics more than you paid them in the base period.

Furthermore, you may not now charge

paid them in the base period.

Furthermore, you may not now charge more than the highest price you charged for the parts in the base period unless a commodity regulation establishes a new ceiling price for such parts, in which case you may charge for such parts the ceiling price so established.

Sec. 6. Pricing for new services and sellers.

(a) If you are a new seller or are sell-(a) If you are a new setter or are seling a new service which cannot be priced under section 5 of this regulation, your selling price is the same as the ceiling price of your closest competitor for the same service to a purchaser of the same

class.

(b) Within 10 days after determining the ceiling price under this section you must report the price in writing to the appropriate OPS district office, explaining how the price was computed. You must also comply with the applicable provisions of section 18 of this regulation.

Sec. 7. Services which cannot be priced under section 5 or 6 of this regulation.

(a) If you cannot determine a ceiling price under section 5 or section 6 of this regulation, you must file an application with the Director of Price Stabilization, Washington 25, D. C., for approval of a

Editor's Note: For the benefit of operators of service businesses, we publish here the complete text of Ceiling Price Regulation 34, covering charges for services. This regulation is not expected to make much, if any, change in present ceiling prices as established under the General Ceiling Price Regulation. However, there are some differences in procedure for establishing ceilings and these ceilings must be reported to the Office of Price Stabilization before June 15.

ceiling price in line with the level of ceiling prices otherwise established by this regulation, and in case of a commodthis regulation, and in case of a commodity rental or a manufacturing or processing service, a ceiling price consistent with the level of ceiling prices established for the sale of the commodity by the applicable ceiling price regulation.

The application shall contain a description of the service, anticipated direct labor and material costs, and the proposed

bor and material costs, and the propose ceiling price. It shall also contain a full explanation of the reasons why you cannot price this service under section 5 or

6 of this regulation.

If you supplied any other service in the base period, submit, in addition, a description of the most comparable service showing your present direct labor and material costs for it and your present

(b) You may not sell the service for which a ceiling price is requested under this section until that price has been approved by OPS, but the proposed price shall be considered approved 20 days after mailing the application (or all additional information which may have been requested), unless, within that time, OPS notifies you that your proposed price has been disapproved.

You must also furnish any additional information which OPS may require and comply with the provisions of section 18 of this regulation.

Sec. 8. Pricing of seasonal services.

(a) Services supplied in the base period seasonal variation subject to

If you have had a regularly established seasonal variation in price and delivered the service in the base period, your ceiling price for your other seasonal periods shall reflect your customary dollar differ-ential between that season and the base

(b) Seasonal services not supplied in

he base period.

If the service was not supplied in the base period either by you, or by a compe-titor in the same general trading area serving the same kind of purchaser, and if you supplied the service regularly during one or more seasons of the period Jan. 26, 1950, to Dec. 18, 1950, inclusive, your ceiling price shall be the price you charged in the last season prior to the base period: **Provided, nevertheless,** That if you are one of the sellers referred to if you are one of the sellers referred to in paragraph (c) of this section you may add to that price the increase permitted in such paragraph (c).

If you customarily maintain other sea-sonal variations in price you shall reflect your customary dollar differential in price between those seasons and the last season

in which the service was supplied.
(c) You may under paragraph (b) of this section use the following table to compute your percentage increase if you are a seller who on each day of the last season prior to the base period employed

not more than seven individuals.

If, however, during the last season prior to the base period, you employed eight or more individuals in any one day and you can show in your report to the Director of Price Stabilization that your direct costs have now increased above your costs in the last season prior to the base period, you may under para-graph (b) of this section add no more than these direct costs to that price which than these direct costs to that price which you charged in the last season prior to the base period unless these direct costs exceed the table percentage applicable to you, in which case you will then use that table percentage.

(1) The table percentage applicable to you under this paragraph and paragraph (b) of this section shall be as follows for the applicable season:

8 per cent Jan. 26, 1950, through April 30, 1950.

per cent May 1, 1950, through June 1950.

6 per cent July 1, 1950, through July 31, 1950, cent Aug. 1, 1950, through Aug.

5 per 31, 1950.

30, 1950. 3 per cent Oct. 1, 1950 through Nov. 30, 1950.

2 per cent Dec. 1, 1950 through, Dec. 18, 1950.
In selecting the appropriate percentage increase apply the percentage for the date in which the highest price for the season was first announced by you in writing or, if there was no such announcement, the first date on which the service was sold by you at the highest price in the season.

son.

(d) This section applies only if the season during which the variation in price was in effect regularly consisted of at least 14 consecutive days.

(e) Reports.
Within 10 ways after establishing or Within 10 ways after establishing or determining your ceiling price, or any change therein under this section, you must report the price in writing to the Director of Price Stabilization, Washington 25, D. C., explaining how the price was computed. You must also comply with the applicable provisions of section 18 of this regulation.

Sec. 9. Pricing changes.

OPS may at any time disapprove or re-

18 of this regulation.

Sec. 9. Pricing changes.

OPS may at any time disapprove or revise ceiling prices proposed or established under this regulation or under section 7 of GCPR so as to bring them into line with the level of ceiling prices otherwise established by this regulation.

You may not redetermine your ceiling price after it has been determined under this regulation unless it is changed by OPS, in which case the changed price shall be your ceiling price.

Sec. 10. Central pricing.

Sec. 10. Central pricing.

OPS may when it deems it consistent with the purposes of this regulation, establish uniform prices for sellers owning or operating more than one service

establishment and may for this purpose require sellers to furnish necessary in

Sec. 11. Commodities included in serv

Your ceiling price for a service under this regulation includes any commodity furnished with the service. If your ceiling price includes a separately stated charge for the commodity, your ceiling price for the service shall be increased or decreased, as the case may be, by the difference between your separately stated. ence between your separately stated charge for the commodity under this regulation and the ceiling price fixed by the applicable commodity regulation.

the applicable commodity regulation.

Sec. 12. Special pricing provisions—
(a) Application of general pricing increase to long-term contracts, etc.

If in the base period you had in effect an increase in your prices for a service to your classes of purchasers generally and you actually charged the increase price to the classes of purchasers whom you supplied in the base period, but you did not supply the service at the increased price in the base period to a particular class of purchaser because either:

(1) You did not supply the service to that class of purchaser in the base period after the price increase, or

that class of purchaser in the base period after the price increase, or

(2) You supplied the service to that class of purchaser in the base period after the price increase at a lower price because you were bound to do so under a contract made before the price increase, then your celling price to that particular class of purchaser shall be:

(i) Your increased offering price to that class of purchaser for supply during the base period, or

(ii) If you had no such increased offering price, then the highest price at which you supplied the service to a purchaser

ing price, then the highest price at which you supplied the service to a purchaser of a different class during the base period adjusted to reflect the cusfomary differential in price between the two classes of purchasers.

If, however, in the base period you announced in writing an increase in your prices for a service to your classes of purchasers generally, but you did not deliver the service at the increased price to any of the purchasers whom you supdeliver the service at the increased price to any of the purchasers whom you supplied in the base period because you were bound under contracts made before the announcement in writing of that price increase, and you did enter into new contracts for future delivery of the service at the increased price prior to Dec. 19, 1950, then at the expiration of each old contract you may institute the announced price increase, adjusted to reflect the customary differential in prices among your tomary differential in prices among your

classes of purchasers.

(b) Percentage commissions on commodity sales or purchases.

If you are a commission seller, buyer, broker, or auctioneer, and in the base period you used a percentage rate to deperiod you used a percentage rate to determine your commission in connection with the sale or purchase of a commodity, you may now apply your highest base period percentage rate to the current authorized price of a commodity under the applicable commodity ceiling price regulation, or to your sale or purchase price of the commodity if it is lower, to determine your commission for the purchase or sale of the same commodity to a purchaser of the same class.

(c) Individual nevotiated prices.

(c) Individual negotiated prices.

If you customorally If you customarily made a practice of charging different purchasers different prices without regard to standards, such as quantity purchased and nature of business (wholesaler, retailer, etc.) each such customer is a separate class of purchaser.

(d) New purchasers.

Your price to a new purchaser is your

Your price to a new purchaser is your established ceiling price to the class in which the new purchaser falls. However, if you followed the practice of maintaining individually negotiated prices, the ceiling price to a new purchaser is the arithmetic average of your base period ceiling prices to purchasers of the serve. ceiling prices to purchasers of the same class for the same service.

But if within one month prior or one

month subsequent to the acceptance of a new purchaser you discontinue supplying an old purchaser to whom you sold during the base period at a price below your average price to purchasers of the same class, your ceiling price to the new purchaser shall be the same as the celling price you charged the purchaser you di

(e) Refusing to supply lower priced services.

(1) A seller may discontinue selling his services. If, however, he discontinues a service that he offered in the base period or since, and sells or offers to sell in its place a higher priced service which will achieve the service which will sell the service which we sell the sell the service which we sell the service whic achieve the same general purposes as the service he discontinues, he is evading the Defense Production Act of 1950, and is violating this regulation, unless it appears that one or more of the following condiexist:

(i) That specialized equipment or supplies requisite to a continuance of the particular service are not available; of (ii) That the continuance of the particular service would be in violation of the particular service are not available; the particular servic

would be rendered impracticable by a governmental order or regulation, or that it would be contrary to governmentally established standards or policies; or (iii) That discontinuance of the partial ar service will enable the seller to maintain other services more necessary to the community directly converged.

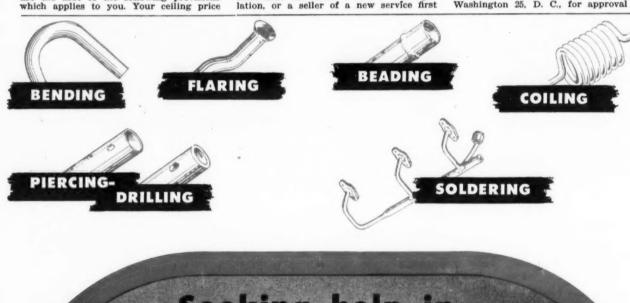
community directly concerned; or

(iv) That other suppliers in the community are able and willing to supply
the requested service or a similar service
in requisite amount and at prices not exceeding the ceiling price of the particular

seller.

(2) A seller refusing to supply a service must, unless otherwise permitted to do so by a general permissive order, certify by registered mail, for which a return receipt has been requested, to the Director

(Concluded on next page)



Seeking help in fabricating tubular parts?

If you are now called upon to supply tubular parts fabricated of non-ferrous tube, look in on the specialized facilities available to you here at Wolverine.

Regardless of how you may be set up for producing the parts you contemplate, you'll find It a definite advantage to consider Wolverine's skill and knowledge of fabrication.

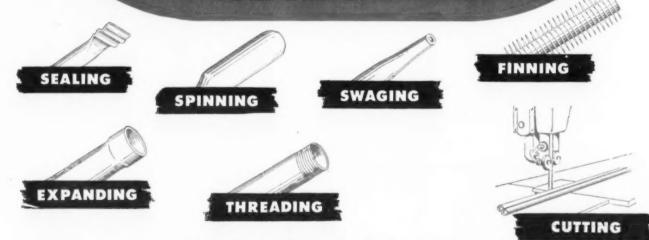
decades of tube-manufacturing and related fabrication experience that can help you immeasurably.

We can supply the complete tubular parts or show you the most efficient ways of fabricating the parts in your own plant.

The illustrations here suggest only a few of the many operations that we are particularly You have at your command over three equipped to render assistance to you.

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Manufacturers of seamless, non-ferrous tubing



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Export Department, 13 E. 40th St., New York 16, N. Y.

Text of CPR 34 for Servicemen --

(Concluded from preceding page)

of Price Stabilization, Washington 25, D. C., the existence of one or more of the conditions stated in this paragraph.
Unless sufficient facts are given to sup-

port the certification, the request will be denied, without prejudice to an opportun-ty to the seller to furnish additional evi-

(3) Effective date on which a service may be discontinued under this para-raph: Unless the Director of Price Stabigraph: Unless the Director of Frice Stabi-ization or his authorized representative hall, by notice mailed to the seller with-n 30 days from the date of the receipt of the certified statement, disapprove the equest, the seller may discontinue the

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(f) Definition: As used in this para-raph, the term "service" means one of he types, forms, grades, or quantities fiered for sale in the base period, or ince, the description of which is re-uired in your statement under section 18 this regulation.

(1) If you customarily supplied service to a class of purchaser by the use of a cost plus contract, you may continue to use such a contract, limited to your high-

use such a contract, limited to your highest base period fee or percentage, but in figuring your costs you must limit each element of cost to the highest rate or charge you made to the same class of purchaser in the base period.

(2) Within 10 days after determining the ceiling price under this section you must report the price in writing to the Director of Price Stabilization, Washington 25, D. C., explaining how the price was computed and stating your base period charges and method of computation for the supplying of the same service to a purchaser of the same class.

(g) Flat rate manuals or catalogues. If

(g) Flat rate manuals or catalogues. If during the base period you used a flat during the base period you used a nat rate manual to determine your price, you must use the same manual now, and you may not increase the hourly rate you charged in the base period. If you used charged in the base period. If you used a catalogue to determine your prices for parts in the base period you may continue to do so now. However, if a specific ceiling price is set by OPS for any item in the catalogue, you may not charge more than such specific ceiling price. You may not use a new edition of such flat rate manual or catalogue unless its use has been approved by the Direc-tor of Price Stabilization, Washington.

Sec. 13. Transfer of business; moving of business; chains—(a) Trans-

If you acquire a previously established business after May 16, 1951, and you carry on such business in an establishment separate from an establishment previously owned or operated by you, your ceiling prices shall be the same as those to which your transferor would have been subject if no such transfer had taken place and your obligation to keep taken place, and your obligation to keep records sufficient to verify such prices shall be the same.

shall be the same.

You must further prepare and preserve (if your transferor has not already done so) and keep up to date the statement required under section 18 of this regulation. Your transferor shall preserve and turn over to you all records of transactions prior to the transfer which are necessary to enable you to comply with the records provisions of this regulation.

to enable you to comply with the records provisions of this regulation.

(b) Moving. If you sell services at retail and move the business out of your trading area after May 16, 1951, you must apply to OPS for establishment of your ceiling prices for that unit under section 7 of this regulation except that if you close a selling unit and open another one in the same trading area, your ceiling prices for the new unit shall be the same as those of the unit you closed. as those of the unit you closed.

Sec. 14. Taxes.

If a tax is imposed on a service cov-If a tax is imposed on a service covered by this regulation and the tax law does not forbid you to pass the tax on to your customers, you may add the tax to your ceiling price in accordance with the following provisions: If the tax becomes effective after Jan. 25, 1951, you may add the tax to your ceiling price if you separately state it. rately state it.

If a tax is imposed on a service cov of and you were not then supplying the service, you may add the tax to your ceiling price as established under this regulation if such price does not already reflect the tax, if you separately state it. If the tax was in effect in the base period and you were then supplying period and you were then supplying service and passing on the tax, you continue to do so; if you separately the tax then, you must do so now.

If in the base period you did not pass the tax on to your customers, you may not do so now. ("Tax" as used in this section also includes tax increase.)

Sec. 15. Additional charges.

may not make a higher charge for offiting, packaging, or other incidents service than you made in the base of to a purchaser of the same class, may you now make any charge for incident of a service if it was not practice to do so in the base period, s you are authorized to do so by the tor of Price Stabilization, Washing-15, D. C.

may not require a purchaser to Dir

25, D. C.
2 may not require a purchaser to larger proportion of transportation incurred in the supply of any than you required a purchaser of ame class to pay during the base of for the same service. Unless auded by the Director of Price Stabion, Washington 25, D. C., you may equire a deposit for any reason or an extra charge for insurance, if it id not do so in the base period, nor you now increase any such deposit d. ser not

16. Customary price differentials.

r ceiling prices, when determined, reflect your customary price differs, including discounts, allowances, turns, and extras, based upon differin classes or location of purchasers, terms and conditions of sale or de-

Sec. 17. Sales slips; receipts.

If you have customarily given a pur-

chaser a sales slip or receipt, you must continue to do so. Upon request by a purchaser, you must, regardless of your previous custom, give the purchaser a sales slip or receipt. Such sales slip or receipt must show your name and address, the date, the description and quantity of each service sold, the price charged for each such service, and the price charged for any parts or commodities furnished with the service.

Sec. 18. Records; filings of statements;

posting.
You must comply with the following provisions for keeping price records and for filing statements of your ceiling prices:

Preserve for examination by OPS all records regarding your prices, rates, or pricing methods for services supplied or offered for supply during the base period (or such other period as is specified as your base period) and thereafter.

(b) Filings of statements.

(1) Prepare and keep for examination by any person during ordinary business hours, a statement of your ceiling prices, rates, or pricing methods for purchasers of each class together with an adequate decription of each such service.

(i) If you have in any case taken the ceiling price of your closest competitor for any service as your ceiling price, in-dicate on the statement in every such case the service, the ceiling price, and your closest competitor's name and 'ad-

dress.

(ii) If your ceiling prices are based upon a flat rate manual or similar pricing manual or parts catalogue or list, you may (instead of appending it to the statement) clearly identify on the statement such manual, parts catalogue, or list by name, edition number, and date, indicating the instances in which it was not your practice in the base period to follow it.

(2) File a duplicate of your statement.

(2) File a duplicate of your statement with the appropriate OPS district office. You may request, if you wish, that the part of your statement in so far as it applies to non-retail services which you sell be treated as confidential and not subject to public disclosure.

Such part of your statement as shall be so treated will then be withheld from public inspection unless the withhelding of the information it contains would be contrary to the purposes of this regula-tion. You may also withhold from public inspection such part of your statement, insofar as it applies to non-retail services which you sell.

(3) You must prepare and file such duplicate statement within 30 days of the date that your ceiling price for a service is first established by this regula-

If you have previously prepared and preserved a statement of your ceiling prices under the GCPR and its amendments, and your ceiling prices have not changed under this regulation, you must prepare and file such duplicate copy of such statement under this regulation. such statement under this regulation

(c) Supplements.

You must also prepare and keep availstatements, and you must file a duplicate copy of each such supplement with the appropriate OPS district office within 10 days after you have delivered any new service or after any change in your selling price is authorized by OPS.

(d) Signature.

These statements and all supplements thereto must be signed by you or your authorized agent.

(e) Exception.

If you can show that the requirements of this section subject you to unusual hardship, you may apply to the Director of Price Stabilization, Washington 25, D. C., for written authorization to depart from these requirements. Such authoriza-tion will be given only if it will not be inconsistent with the purposes of this

(f) Posting.

(1) OPS may require you to post your ceiling prices for any service which you sell at retail whenever it is deemed necessary to the effective enforcement of this regulation.

(2) If, however, you operate a service establishment making sales at retail, you must, not later than 30 days after the date that your ceiling price for a service is first established by this regulation, post your ceiling prices in a prominent or clearly visible position in your establishment.

Sec. 20. Adjustments-(a) General ad-

OPS may adjust any ceiling price established under this regulation upon a demonstration of substantial financial hardship threatening your ability to continue to supply a service, subject to the following limitations:

(1) No adjustment will increase your ceiling price above the levels necessary to permit you to continue the sale of your services;

your services;

(2) No adjustment will be made if it will create or tend to create a need for increases in the prices of other sellers in your locality or elsewhere.

In judging whether a ceiling price subjects you to a substantial financial hardship, OPS will take into account such pertinent factors as the nature of your business, its earnings, and the earnings of your trade as a whole during a repreyour trade as a whole during a representative period.

A price increase may be denied in whole or in part, however, if your hard-ship is attributable to such causes as a decline in sales volume because of reduced demand, general manpower short-age, shortage of essential supplies, or other difficulties apart from your ceiling

Even though a particular service or type of service is not profitable, an ad-justment may be denied in whole or in part if in the judgment of OPS, such action is justified in view of the profitability of your business as a whole.

(b) Adjustment by buyer-seller agree-

In order to permit the continuance of

a limited supply of an essential non-retail service, you may, if the buyer agrees to absorb a price increase above your ceiling price for that service, apply to the Director of Price Stabilization, Washington 25, D. C., for permission to increase the price of that service to him by an amount not to exceed direct labor and amount not to exceed direct labor and material cost increases incurred by you since your ceiling price for that service was established.

Twenty days after filing under this paragraph for a price increase or sup-plying such additional information as plying such additional information as OPS may request, you may charge your increased price unless you are advised by OPS that your application has been denied. The Director of Price Stabilization or any official of OPS having authority to act may at any time deny tite application for the price increase in any case where it appears to be inconsistent with the purposes of the Defense Production Act of 1950.

Sec. 21. Adjustable pricing.

Any person may agree to sell at a price which can be increased up to the ceiling price in effect at the time of delivery; but no person may, unless authorized by OPS, deliver or agree to deliver at prices to be adjusted upward in accordance with action taken by OPS after delivery.

tion taken by OPS after delivery.
Such authorization may be given when a request for a change in the applicable ceiling price is pending, but only if the authorization is necessary to promote distribution or production and if it will not interfere with the purposes of the Defense Production Act of 1950. The authorization may be given by the Director of Price Stabilization or by any official of OPS having authority to act upon the pending request for a change in price or to give the authorization.

The authorization will be given by or-

The authorization will be given by der, except that it may be given by letter or telegram when the contemplated revision will be the granting of an individual application for adjustment.

Sec. 27. Definitions and explanations.

(a) When used in this regulation:
(1) "Appropriate OPS district office"
means the district office of the Office of
Price Stabilization for the district where
your place of business is located and from which your sales are made.

"Base period" means the period as of which your ceiling prices are fixed under this regulation. (3) "Closest competitor" means that

seller selling the same service under substantially the same conditions who is in close competition with you and is located nearest to you.

(4) "Commodity." This term includes commodities, materials, articles, products, supplies, components, processes, and contracts to buy, sell, or deliver any of the foregoing.

(5) "GCPR" means the General Ceiling Price Regulation.

(6) "Non-retail sale" means a sale to n industrial, commercial, or governmental user.

(7) "Offered" (as that word is used in connection with price) means the price quoted in your base period price list, or, if you had no price list in the base period, the price which you regularly quoted in any other manner, or the price determined by your base period rate or price.

many other manner, or the price determined by your base period rate or pricing method.

But "offered" (price) does not include a price intended to withhold a service from the market, or a price you offered as a bargaining price if you usually sold at a price lower than your asking price.

(8) "OPS" means the Office of Price Stabilization and the Director of Price Stabilization or any official to whom he by order shall delegate the authority therefor.

(9) "Person" includes an individual, corporation, partnership, association, or any other organized group of persons, or the legal successor or representative of any of the foregoing, and the United States and any other government and the political subdivisions and agencies of any of the foregoing.

(10) "Pricing method" is a formula by which you determined a price for a service in the base period which included a rate, and an item for labor materials, and markup for overhead and profit, or any of such items, whether or not the formula was disclosed to the purchaser.

Unless the formula included a rate, the figure which resulted from the application of the formula was a flat price (except where the supplying of a service was on

a cost-sharing basis).
(11) "Purchaser of the same class" means a purchaser belonging to the same price class, that is, to a group of pur-chasers to whom it was your established practice in the base period to supply the

same service at a particular price.

If in the base period you customarily supplied or offered to supply the same service to any purchaser at a price differ-

ent from the price at which you supplied or offered to supply the same service to other purchasers, that purchaser is in a purchaser price class by himself.

(12) "Rate" is a means of determining a price by multiplying the time involved in supplying a service by a fixed charge per unit of time, or by multiplying the price of the commodity involved by a fixed procentage.

fixed percentage.

(13) "Records" includes but is not limited to, books of account, sales lists, sales slips, orders, vouchers, contracts, receipts, invoices, bills of lading, and any other papers and documents relating to your

prices.

(14) "Rental" means any leasing of a commodity except where the lease is a substitute for a conditional sales contract, chattel mortgage, or other security device in connection with an installment sale, or except where the lease contains a provision giving the leasee an option to buy the leased commodity at a stipulated price from which all or a portion of the payments made as rent are to be deducted.

(15) "Season" means any division of the

(15) "Season" means any division of the year into periods of at least 14 consecutive days for pricing purposes, such division being based upon regular and recurrent differences in demand for or supply of the service.

(16) "Sell" or "supply" includes sell, rent, supply, dispose, barter, exchange, transfer, deliver, and contracts and offers to do any of the foregoing. The term "sale," "supply," "selling," "supplying," "sold," "supplied," "seller," "supplier," "buy," "purchase," shall be construed accordingly. cordingly.

(17) "Service" or "services" means any act or acts performed or rendered, otherwise than as an employe, for a fee, charge, or other consideration. The term includes any privilege sold or granted, or any forbearance to act, for a fee, charge, or other consideration.

charge, or other consideration.

The term also includes the rental of any commodity or service if the rental charge is not covered by another ceiling price regulation and has been exempted from price control.

(18) "You" means a person and refers to any seller or supplier subject to this regulation. If you supply services through more than one place of business, each such place of business shall, for the purposes of this regulation, be considered a separate seller or supplier.

Effective date. May 16, 1951.



UNITS for Commercial Electric Refrigeration and Air Conditioning Fixtures

CAPILLARY 1/5 H. P. UNIT - ideal for small freezers, ice-cream cabinets, display fixtures, beverage dispensers, office water coolers and many other types of applications.

1/4 and 1/3 H.P. MODELS—designed for both capillary tube and expansion valve . . . more compact . . . internally spring-mounted compressors reduce vibration and wear - give longer life.



REDESIGNED AND IMPROVED 1/2 and 3/4 H. P. UNITS ... added capacity ... low height ... more compact ... dual use ... adaptable for either medium- or low-temperature applications.

REDESIGNED AND IMPROVED 1 H. P. UNIT now covered by the Supermetic 5-Year Protection Plan. Has the same hermetically sealed, steel-cased compressor design that has been such a sensational success in the Servel fractional H. P. units.

IMPROVED 1-1/2 and 2 H. P. TWO-CYLINDER CONDENSING UNITS, four-cylinder 3 H. P. compact . . . increased capacity.

IMPROVED 1/2, 3/4, 1, 1-1/2, 2 and 3 H. P. WATER-COOLED UNITS . . . Surprisingly small



Models for every commercial refrigeration and air-conditioning use . . . 1/5 to 5 H. P.

MAIL THE COUPON TODAY

for complete specification and capacity data on the full line, and those sizes in which you are most interested. If you are a dealer or serviceman, ask for the name and ad-dress of the nearby authorized Servel wholesale supplier for your territory.

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NAME (personal)			
TITLE			
COMPANY			
ADDRESS	ZONE	STATE	



ONE STOREROOM of a Dutch Cooperative Dairy League warehouse at Meppel, Netherlands. The first warehouse to use air conditioning in its storage rooms now can handle \$6,500,000 worth of cheese annually. Products are aged here for two or three months before being exported.

Air Conditioned Cheese

Cooling Aids Dutch Economy by Making Possible Storage of Huge Quantities of Cheese for Export

MEPPEL, The Netherlands — The first big air conditioned cheese warehouse in Holland is now storing some \$6,500,000 worth of Dutch cheese annually mainly for export, thus aiding considerably in supporting the tiny country's postwar economy.

Mr. Raaymakers of Koeltechnisch Bureau "Fri-Jado," local Frigidaire dealer at Breda, installed the 62½- ton system using 10 Frigidaire condensing units ranging from 5 to 10 tons capacity each.

Raaymakers reported that the installation of "Freon" equipment in this warehouse represented something of a victory for him. It was the first time that "Freon" condensing units of 5 hp. or more had been sold to the Dutch Cooperative Dairy

League, which encompasses almost the entire Dutch dairy industry. The League had previously preferred using slow speed ammonia compressors, he declared.

The installation involved air conditioning for separate rooms on each of four floors plus four cold rooms for butter storage in the basement.

The cheese storage rooms, where young Dutch cheese is stored for two or three months, have a total capacity of about 800 long tons. The butter rooms have capacities of 33 long tons each.

The cubic foot capacities of the various rooms and the model condensing unit used to do the cooling job are as follows:

Room	Cu. Pt.	Model Condensing Unit
Ground floor	6,300	CWK-750T
First floor	50,000	CWK-500T
Second floor	67,000	CWK-750T
	28,300	CWK-500T
Third floor	39,700	CWK-750T
	67,000	CWK-1000T
Butter storage rooms (each)	0.000	CWK-500T

Each condensing unit for cheese air conditioning is connected to two multipath air coolers, which provide proper air circulation through ducts. The coolers are equipped with reversible propeller type fans.

Each cooler is equipped with a water spray system and heating coils.

Each condensing unit for butter storage is connected to four forced air evaporators of local Netherlands make. Raaymakers said.

Cheese temperatures are maintained as close as possible to 53° F. with 95% r.h. Fresh air is used only once in 24 hours. Refrigerant temperature is about 38° F. Product load is calculated at 50 tons per day.

insist...
on a
CLEANABLE
CONDENSER

Water-Cooled, Double Tube, Counter-flow

Regardless of whose condensing unit you buy in any size from ½ through 25 H.P.—your first demand is to insist that it have a CLEANABLE water-cooled condenser. It costs no more originally, and the added advantages in longer life and more efficient service can't be overlooked. No matter how poor the water conditions, and no matter how long the service of the unit, you can always count on

restoring new-unit efficiency by the simple use of a spiral cleaning tool which will thoroughly remove, mechanically, all the harmful corrosive material that might accumulate on the water tube interiors. You needn't settle for less, for almost all leading manufacturers are recognizing the advantages of cleanability—and are equipping their units accordingly in all sizes. Capacity Range 1/3 through 25-ton.

JOBBERS in all principal cities carry HM condensers in stock for immediate delivery.



Hotels Provide Big Market for Room Coolers, Carrier Survey Finds

SYRACUSE, N. Y. — Multiple installations of room air conditioners in more than 90 first-rate hotels in all parts of the country are shown by a recent survey of Carrier Corp. distributors and dealers.

Running well above 100 units in some instances, such installations have been employed both to complete air conditioning projects handled by central station equipment and to facilitate the rental of certain blocks of rooms where the hotel is not completely air conditioned, according to dealers.

Wide Variety of Purchase Reasons Cited

A variety of "purchase reasons" were reported by hotel owners and operators, including citations of low first cost, economical operation, flexibility in meeting the desires of individual guests, lower room cleaning costs, and the reduction of noise in heavy traffic areas.

In what is believed to be the largest single sale of room air conditioners on record to an end-purchaser, 560 1-hp. units were purchased for the Baker hotel, Mineral Wells, Tex., and the Gunter hotel, San Antonio, Tex.

Both hotels were approximately 50% air conditioned with central station apparatus, and the installation of room air conditioners took care of the remaining half of the job. The sale and installation of the units were handled by the Joe Thiele Co. and the Bell Kotzebue Co., Carrier distributor and dealer in San Antonio.

The Mayflower hotel in Washington, D. C., a Hilton hotel, which was approximately 80% air conditioned by means of a central system, has obtained 222 Carrier room units over the past five years in a succession of purchases to complete its air conditioning installation.

Hotel Chains Spread Cost

The William Penn, a Statler-operated hotel in Pittsburgh, has acquired nearly 200 units since 1947 in a similar repeat purchase program. Recent purchases by other Statler hotels include 60 units for the Statler in Boston, and 50 units each for the Cleveland and Detroit Statlers.

The Mayflower and William Penn hotel examples indicate another advantage of individual room units, in that hotels can budget their purchases over a period of years instead of making the entire air conditioning investment at one time, Carrier pointed out.

Ease of Installation Is Big Factor

"The units may be installed without losing a day's rent on any room, without redecorating cost, and without inconveniencing guests," the company said.

The Mayflower's experience with Carrier units "has been very successful," according to C. J. Mack, general manager. He stated that air conditioned rooms were quieter and easier to keep clean, and that rooms equipped with individual units provided greater flexibility in meeting requests, particularly during the

spring and fall when there are wide variations in Washington weather conditions.

Mack added that "occupancy figures prove the investment in air conditioning is a good one."

Other Hilton hotels using Carrier room units, in addition to the Mayflower, are the Palmer House and the Stevens in Chicago; the Plaza and Roosevelt hotels in New York City; and the Hilton hotels in El Paso, Texas, and Albuquerque, N. M.

Another large group which has purchased room units for the second straight year is the Albert Pick chain. Among Albert Pick hotels now equipped with Carrier units are the Melbourne and Mark Twain, St. Louis; the Durant, Flint, Mich.; the Carter, Cleveland; the Belden, Canton, Ohio; the Georgian, Evanston, Ill.; the Kansan, Topeka, Kan.; the Fort Hayes, Columbus, Ohio; the Miami, Dayton; and the Congress, Chicago.

More Rooms Can Be Used Year-Round

The President hotel on the Atlantic City, N. J. boardwalk has installed room air conditioners in apartments facing the hotel court away from the ocean. Without air conditioning there were many days when these rooms were very uncomfortable, according to Jack E. Morris, resident manager.

With these installations the hotel is assured "that these 'away from the ocean' rooms will be occupied," Morris said. "We are planning to purchase more room air conditioners."

The Billows hotel on Miami Beach, Fla. turned to room air conditioners as an economical means of maintaining its reputation, it was stated by A. H. Mazor, manager. He described his ½-hp. units as "quiet and efficient although they are in what we think are larger than average rooms."

Wall Openings Used In Place of Window Mounting

In a special installation of some interest in Clearwater, Fla., architects planning the Sandpiper hotel designed wall openings into which Carrier room units were fitted snugly, eliminating the need for window sill mounting.

Among the more than 90 first-rate hotels in all parts of the country now using Carrier room air conditioners are the Hotel Phillips and New Yorker, Kansas City, Mo.; Bismark and Sherman, Chicago; Pierre and Savoy Plaza, New York City; Berkeley Carteret, Asbury Park, N. J.; Savery, Des Moines, Iowa; Colonial Terrace, Atlanta; Congress, St. Louis; Warwick, Houston; Gulf Towers, Galveston; Golden Spur, San Angelo, Texas; Ardmore hotel, Ardmore, Okla.; and Roger Smith, Washington, D. C.

Air Cooled Specialty Shop Opens

NEW ORLEANS—Completely air conditioned, the new, enlarged Mayfair of New Orleans, a women's specialty shop at 1017 Canal, held its formal opening March 8. The store was formerly in the 800 block.



'Wartime' Merchandising Plan Includes Cutting Profit Leaks, Adding Customer Appeal, and Getting Most from Salesmen

ST. LOUIS-It's time for the appliance dealer to "take stock of himself" and set up 1951-52 merchandising plans aimed at selling in a constrained market, according to E. Wildberger, head of the C. E. Wildberger Co. here.

Wildberger, who has been in business for 18 years in the North St. ouis residential district, is convinced hat war conditions, credit restricions, and a tight-supply situation vill exist for some time.

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ICE CUBE

Whenever food or refresh-

ment is served, ice cubes

as you need them. Choice

Modern flush fronts with

recessed handles in popu-

lar sizes. Ten models to

choose from. Available in

white Dulux, stainless steel

fronts and glass doors.

Engineered to serve beer to the

Brewmaster's"

appearance en-

World famous

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inless steel or brown Dulux finish.

UPRIGHT FREEZER

Scientific placement of

loss, insure balanced freez-

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ag coils, two separate

compartments, dual to minimize cold

ESIGNED-ENGINEERED-MANUFACTURED UNITED FRIGERATOR COMPANY

Locust and Walnut Sts.

HUDSON, WISCONSIN

15 Chic Feet

hances any establish-

models in Stainless steel

KOOLMASTER DIRECT DRAW

DRY KOOL BOTTLE COOLER

of 3 beautiful models.

Therefore, he has set up a "warime" merchandising program. This ve-point program, he feels, comines the best methods of cutting own on profit leaks, adding extra customer appeal, and realizing the most from each salesman.

SELLING CONDITIONS ARE DIFFERENT

"It isn't difficult to see the difference between selling conditions today and those of a year ago," Wildberger pointed out. "For example, floor traffic now is twice what it was 12 months ago, and customers are willing to go to extreme lengths to find what they want.

"Still, many of our outside prospects tell us frankly that they are going to buy their new refrigerator. regardless of brand, from the dealer who allows them the largest tradein on an old box. Others are inclined wait until prices drop still further, and don't hesitate to say so.

'In other words, it is going to take a new type of selling program to

Muited

FOR Quality

AND Economy

maintain volume for the next few

Wildberger's volume for 1950 was over \$250,000. Since his new program was adopted, the store has managed to maintain the same pace this year. And the firm believes it will be able to "hold its own" in future years.

The reason, Wildberger emphasizes, is the fact that the store will "sell the merchandise not the price" and frame all selling operations around the most efficient possible

The five points which are making this possible are:

1. A more appealing new store designed to "make prospects comfort-

Modernization of the whole store included installation of a sloping 40ft., all-glass front which increases visibility into the store for the hundreds of motorists streaming by on busy Kingshighway Blvd.

AIR CONDITIONING MAKES SHOPPING PLEASANT

Also new is a 10-ton air conditioning system which will make shopping pleasant during St. Louis' hot summer months.

Wildberger further provided a restful atmosphere, abetted by comfortable lounges and chairs spread throughout the showroom, and a soothing color scheme. Walls are done in chartreuse, with a gray soundproof ceiling, rich tile floor, and modernistic concealed lighting.

Now customers can relax on lounges while salesmen extoll the virtues of particular appliances or while waiting for service. Most of the 10 lounges face "active" display units so that it is seldom necessary for a customer to stand up or walk to look at anything.

'When you put the prospect into a relaxed mood, price is likely to be a less potent consideration," berger said. "Therefore, we have made the store as comfortable as possible, and leave it to the all-glass front to lure the prospect inside."

Incidentally, the Wildberger store is located in the middle of an important shopping district, with a large chain department store on one side, a huge furniture store on the other, and many shops of various kinds across the street. There has been a tremendous increase in floor traffic ever since the modernization program was completed-and Wildberger believes that "comfort sells itself."

2. A new record department.

Where the Wildberger store has never before bothered with phonograph records, the store now incorporates one of the largest such departments in the St. Louis district. This department occupies about 35% of the space in the rear.

With attractive blonde fixtures, comfortable air conditioned listening booths, and self-serve display racks, the record department is valuable as a traffic builder, Wildberger be-

course," he stated, "it may bring in more teen-age youngsters than anything else, but each of these is a potential appliance buyer in the fit to win their confidence early.

"But records have proven steadily profitable in their own right, and well worth the space taken up. Because of the record department, we have had to discontinue cooking schools and other such promotions, but we find that the extra traffic pulled far offsets this other form of promotion.

Wildberger expects to maintain the record department at its current strength, even if it merely "breaks even.'

3. Operating with older, more experienced salesmen.

Wildberger feels that older men instill more confidence in prospects

To Reach All Key Men . . . in the Refrigeration and Air Condi-tioning industry throughout Canada, use the only Canadian publication covering the field. . . .



A "National Business" Publication

than young ones, so all four of his salesmen are older men with long experience. Each has been allowed to choose his own compensation method and to operate his "own business," making as many outside calls or spending as much time on the floor as he wishes.

One salesman has been with the Wildberger concern for 14 years. He elected a straight commission of 12% as his pay method, and averages between \$350 and \$400 a month the year-round. The other three receive a salary and commission.

The fact that the salesmen work in an air conditioned store and have a choice of pay systems helps keep them on the payroll and expending their best efforts, Wildberger said.

A point which the dealer brought out here is that in the face of pricecutting, his veteran salesmen are not going to "give away their commissions. Instead, each will utilize all of the selling skill and experience learned over many years to bring about a profitable transaction for the store. We have evidences of this almost every day."

SERVICE DEPARTMENT ELIMINATED

4. Getting rid of all "unnecessary" expenses.

First, Wildberger has taken the highly unusual step of doing away altogether with a service department, delivery crew, and truck.

"We have found worthwhile savings in this simple change," he said.

"For example, we do not operate our own truck at all. Instead, we pay a transfer firm, whose work has always been excellent, \$4.50 to deliver new appliances. This does away with the expense of buying a truck, fuel costs, paying the drivers, etc."

Carrying the complete Frigidaire line, Wildberger has at his service one of the largest distributor repair plants in the St. Louis area. So he relays all service calls directly to the distributor.

HOW TRADE-INS ARE HANDLED

With the service department eliminated, trade-ins are handled as follows:

All of the salesmen can estimate allowances properly. If a used refrigerator is in good enough shape to be sold as is, a classified advertisement is run in the bargain section of a St. Louis newspaper, and the box sold right off the floor.

If the refrigerator needs reconditioning, Wildberger sends it to a cooperating refrigeration service firm, which has no sales department of its

"We pay anywhere from \$20 to \$40 for reconditioning work," he explained, "always keeping enough spread for the store so that we at least break even on the box

NO DIFFICULTY GETTING RID OF TRADE-INS

"The repair shop picks up the refrigerator, reconditions it, and delivers it to the store, all in the same contract. After all expenses have been figured, we add a small markup percentage as profit and, to date, have experienced no difficulty in getting rid of all trade-ins via this

"If the customer has a box which is a 'junker' with no resale value, we leave it in the house, or at best, deliver it to a junk yard."

Service on both new and used appliances, Wildberger emphasizes, is as rapid as the store could provide with its own crew, and, he adds, it is saved the necessity of carrying large parts inventories, paying salaries for shopmen, buying expensive equipment, etc.

5. More potent advertising.

A consistent user of "neighborhood journals" as well as metropolitan dailies, Wildberger started a little more than three years ago to use bus cards. These, he believes, are the most effective appliance advertising available to the outlying district retailer.

"We are using 100 cards per month," he said. "The cards are all photographically illustrated, list all of the appliance lines we carry and our services, and invite the customer to 'Buy the Best' when it comes to home appliances.

"The cards are changed once every three months. Since nearly all bus riders look at the car cards, we think that we have sold more customers through this advertising medium than any other."

In addition, the Wildberger store runs a display advertisement on a seasonal appliance about once a month in metropolitan newspapers.

NEW PRODUCTS?

Turn to "What's New" Page for useful information on new products. Use Key No. for fastest service.



FEDDERS-OUIGAN CORPORATION 57 TONAWANDA STREET, Dept. AC-12, BUFFALO 7, N. Y.

137 Wellington St. W., Toronto, Ont.

ens its



(Concluded from Page 1, Column 1) are gone. It will be present to you when the energies of your body have fallen away from you. It will last you until your death. It will make your hours pleasant to you as long as you live."—TROLLOPE.

Fable for Moderns

In his old Chautauqua circuit lecture for children (entitled "The University of Hard Knocks") Ralph Parlette filled a jar with beans and a few walnuts.

"See this little bean at the bottom?" he would shout. "Little bean whines, 'I ain't had no chance—just help me up where them big fellers are and I'll show 'em.'"

Parlette would put a brightly colored bean on top, shake the jar, and explain that Life never stands still. Soon the tagged bean would rattle to the bottom.

Then he'd ask, "How can you get to the top?"

Children in the audience would shout back, "Grow up and grow bigger."

Sad But True

Elder statesmen of the business world profess to be baffled by the reluctance of younger men to go into the highly rewarding profession of salesmanship nowadays.

about losses from

LEAKING LIQUID INDICATORS

Even after a few "reluctant virgins" from an oncoming generation have been inveigled into joining a sales department, the executives of that concern find that these youngsters don't like to leave the office or store. They want buyers to come to them.

They are pushed, with difficulty, out into the economic stream.

This attitude causes old-time sales executives—who got where they are by pounding the pavements, wearing out shoe-leather, ringing doorbells, waiting impatiently in ante-rooms, thinking up clever strategems to button-hole prospects, and never taking "no" for the final answer—to throw up their hands in disgust. But it shouldn't.

Laziness is a natural human trait. All animals hate work. And salesmen are human animals.

Lolling around in the sunshine or the shade, playing games, relaxing, day-dreaming, floating with the tide or the current, eating one's fill without working—that's how we'd all like to laze away our days.

And potent political demagogues of the last quarter century have encouraged the world's youth—the citizens of today and tomorrow—to indulge in these pipe-dreams. The "something-for-nothing," day-dream (the world owes us a living) has been transfused into the bloodstreams of many young men and women who emerge with diplomas from our schools.

"Marry for money," our sons have been advised. And, "It's just as easy to love a rich man as a poor one," has been whispered to girls. Well, maybe that's true. But many are culled and few are chosen.

In the meantime, Cinderellas who

REMCO EXPLAINS THE

aren't chosen by Fairy Princes have to earn a living. Yet the Huey Longs of our day tell 'em:

"Why work or worry? The government—or the union—will take care of you. Take it easy. Look for a soft spot."

It's no wonder that salesmen and saleswomen are hard to find.

Quoting Our Favorite Reporter

H. C. L. Jackson writes:

The other day we stepped into the elevator in the Majestic building at the first floor, and headed for the tenth. We'd hardly entered the car before we were somewhat shouldered-around by a young man who charged in gaily.

He had a light-gray, narrowbrimmed hat on the back of his head; his form-fitting gray checked suit was faultlessly pressed; his shoes shone like the hopes of the faithful, and out of his breast pocket jutted a display handkerchief with four points spearing perkily up.

"Ninth floor," he clipped, banging a bulging brief case on the side of the car. At the ninth he debarked, and went clacking down the corridor like the impersonation of Salesmanship-on-the-Hoof.

Somewhat wearily our Reporter envied his energy. He remembered it during the 20 minutes he stayed in the haven of the Tenth Floor, and still thought how wonderful it must be to be that young, and that dynamic, as he entered the down-bound elevator.

At the ninth floor it stopped again, and that self-same young man got on. His hat was crammed down over his eyes. His shoulders sloped forward. The bulging briefcase seemed too heavy for him. We could have sworn that the jutting points on that pocket-handkerchief looked a little limp. At the ground floor he shambled out toward the revolving door on the Michigan Avenue side.

Before he reached that door; before he'd taken more than 10 steps, he stopped. Abruptly, his shoulders snapped back square and proud; he shoved his hat to the rear of his head; the briefcase miraculously looked light and—his heels began to click forward purposefully.

He pretty nearly burned out the ballbearings on that revolving door as he sailed through, out into the wide, wide world, and waiting world, where Youth and Self-Confidence and Gimp still could make a Sale...

Verses of the Week

Blessings on thee, little man, Barefoot boy in sport sedan. Grandpa walked to school each day, But you shall have a ride both ways!

Grandpa worked a six-day week To keep his family fat and sleek And put away some hard-earned bucks

Against old age or changing luck.

He sent your Pop to college, too, But we won't do the same for you. Why waste the time to educate? We'll show you how to "riplicate!"

You'll buck no vulgar competition, But hold a cut-and-dried position. Your old age pension will be free —just riplicate form X-2-3!"

Blessings on thee, little man! Vegetate as best you can, And gird thee not against life's storm Thy boat shall be a triple form!!

—Planer Talk from the Lumber & Bldg. Material Dealers of Western Pennsylvania.

How eagerly she goes to see A picture with this guarantee: "It wrings your heart!" "Demands your tears!"

"The most heartbreaking tale in years!"

Upon emerging, make-up messed, Her hanky sodden, she with zest Declares: "I've never seen before A picture I enjoyed more!"

Such weeping seems to make her happier—

Than which the male finds few things

INA S. STOVALL

The Pursuit of Property

Real Salesmen are profit-seekers. They hope to get ahead of their fellow-men through their own daring and initiative.

Honest Salesmen are self-starters. They don't want mama's help, or father-in-law's patronizing. They're independent and self-reliant. They go out looking for business, and work to gain experience. In short, they're pioneers. They earn their own living, they build their own careers, and they call attention to themselves because they work harder, dress better, and live daringly.

But they're a vanishing species. The tendency of Our Times is in the direction of the parasite.

"Why knock yourself out?" this philosophy insinuates.

Big idea of this false philosophy is this: Property can't be earned legitimately. ("Them that has it, keeps it.") So, the false philosophers teach, property must be married, stolen, or—if all other measures fail—liquidated.

To be sure, the U. S. Constitution's Bill of Rights declares that no man shall be deprived of life, liberty, or property without due process of law. Futhermore, every American citizen, our Constitution guarantees, can "pursue happiness." And "happiness" is based upon ownership of "property," isn't it?

* Well, no.

It's the pursuit of "property" which makes men happy—if they are pursing something they can win by their own efforts.

The chase, the pursuit of profits, is exciting and invigorating. Through its zest, fun, and wide-awake awareness of "the score," it surcharges men with ambition and eagerness. The "die for dear old Rutgers" spirit is the primal urge which spurs real salesmen to work 28 hours per day. When they do, the wheel of Progress spins again.

The pursuit of property, of course, always runs smack up against competition. Others want what you do; and will fight and scheme either to prevent you from getting it (because they already have it) or to glom onto it themselves.

Any salesman faces the hazard that people won't want what he is selling. They may covet a dingus that somebody else is selling. Or, if they do want the product or service offered by the salesman, it's possible that competition can provide that service or product cheaper, better, or in a more attractive form. That's why selling is no bed of roses. It's a real he-man job. It's no place for boys, or for lazy adolescents who dream of sitting behind a polished mahogany desk and pressing buttons.

But golly! What fun it is—and how rewarding it is—for men who want to stand up on their own two legs.

Good Philosophy: Pass It On

Elder Statesmen of Business are remiss in their duties to the nation and to the oncoming generation if they fail to pass on this conception of genuine pleasure and pride of accomplishment.

"There's no business like show business," and there's no fun-in-business which can compare with salesmanship as an enjoyable occupation. Getting rich the easy way may seem attractive to youngsters. But it's the hard way to get through life in the end. This is one important lesson which some educators don't teach. And it's the greatest lesson which fathers can teach their sons.

To feel good, you must be good. And you must know in your own heart that you're a superior man, if you want to enjoy life.

True happiness consists in making your own way, in earning your own living, in beholding yourself to no patron, in knowing that you're useful.

If fathers and employers can succeed in getting this Truth across to young men who ask them for jobs, the Profession of Salesmanship won't lack apprentices. In no other occupation or profession can a man be so sure of himself.

Words of Wisdom

"Freedom to think as you will and to speak as you think are means indispensable to the discovery and spread of political truth. Without free speech and assembly, discussion would be futile; with them, discussion affords ordinarily adequate protection against the dissemination of noxious doctrine. The greatest menace to freedom is an inert people. Public discussion is a political duty; and this should be a fundamental principle of American government."

—JUSTICE LOUIS BRANDEIS.

"The test of good management is not only its ability to direct and give leadership to men, blending their efforts with materials, machines, and financial resources, but also its ability to manage ideas."—Louis B. NEUMILLER.

TAKE ADVANTAGE

DEVALUATION

REFRIGERATOR

SEALED UNITS

Get REMCO'S E-Z-SEE TO INSURE GREATER PROFITS

Even though they may be constructed of the highest

quality materials, conventionally designed liquid indicators

depend upon the resiliency (springiness) of the gasket

material to form the initial seal and also to maintain the seal.

their resiliency with age, and as they lose their resiliency,

they "cold-flow" or "take a set" - then a leak results.

Unfortunately, rubber-like gasket materials tend to lose

But not so with E-Z-SEE. In the exclusive E-Z-SEE design,

(see illustration) each gasket is backed up by a spring. As

the E-Z-SEE gaskets lose some of their resiliency, a leak

cannot result because the coil springs compensate by con-

tinuing to apply just the right amount of force upon the

gaskets, to permanently maintain the seal.

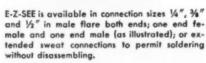


Note how in E-Z-SEE, unlike in conventional liquid indicators, spring-compensated leak-proof gaskets and 'floating' high-pressure Pyrex glass assure you the following advantages:

1) Perfectly safe . . . glass is protected from damage by unique slotting arrangement — safe at pressures up to 500 PSI. 2) Positively leak-proof . . . can't leak because springs automatically maintain just the right force to form a positive seal around the glass. 3) E-Z-to-see through . . . both sides of the body are open to let in light through the tubular high-pressure gauge glass. No more fosses from leaking — here truly is the 100% answer to the industry's demand for a fool-proof liquid indicator.

Send for Literature and Prices.





CARRIED IN STOCK BY LEADING WHOLESALERS EVERYWHERE

West Coast warehouse stock at: 2103 So. San Pedro, Los Angeles, Calif. EXPORT DEPARTMENT: Melchior, Armstrong, Dessau — Ridgefield, N. J.

ALL VOLTAGES

Now available for the trade at keen prices either with body and starting relay only or complete, ready for immediate installation as depicted above, the "LECOMETIC" suitable for ambient temperatures up to 110° f.

We can offer standard open type condensing units. Also the LEC range of domestic cabinets.

ARN SALES DEPT.

BOGNOR REGIS

Parts Wholesaler Takes Customers Right to Factory Hart Joins Mointire as



HARTERED BUS was provided by J. M. Oberc (kneeling at right), parts wholesaler, to ke Detroit contractors and other users of refrigeration down to Sidney, Ohio, where they spected plant facilities and got acquainted with factory personnel at Copeland Refrigeration Co.



COPELAND PRESIDENT Harry Thompson welcomes the group to Sidney. addressed the group were (left to right) Dale Bodine, service manager; Frank Gleason, vice president in charge of sales; J. M. Oberc; Rudy Berg, assistant sales manager; Charles Curtis, vice president in charge of manufacturing, and Oskar Buschmann (extreme right), vice president in charge of engineering.

Higher Percentage of Benzol Production

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BUFFALO-Pioneer use of refrigeration to increase production of vitally-needed benzol is planned by the Donner-Hanna Coke Corp.

The company announced it has received a \$242,000 certificate of necessity from the Department of Interior for the project.

Benzol is obtained primarily from coke oven gas. The benzol is extracted by "scrubbing" the gas with petroleum oil capable of absorbing the benzol. The benzol then is recovered from the oil by distillation.

Under normal processing about 85% of the benzol is extracted from the gas. In the past, extraction of more than this amount was considered too expensive.

But Donner-Hanna believes it can extract up to 98% by refrigerating the oil. At lower temperatures, Donner-Hanna engineers think, the 'vapor tensions" in the gas, which tend to resist giving up all of the benzol, can be almost entirely re-

The process will be of the greatest value in summer months when it is most difficult to keep down the temperatures of the "scrubbing" oils.

Donner-Hanna engineers said the equipment, which will include rebuilt scrubbers and steam-jet refrigeration equipment, will increase annual benzol production about 300,gals. a year to 3,900,000 gals.

While the cooling process will more expensive than our present me hod, it certainly will be cheaper the process of synthesizing petroleum which is now being pushed the Government," Vice President General Manager Philip S.

Savage of Donner-Hanna said. avage pointed out that benzol ssential in the production of such delense items as synthetic rubber nylon.

Refrigeration Permits Loudon Cancels Cold-Trol As Eastern Distributor

MINNEAPOLIS - Roy Loudon, president of Loudon Mfg. Co., recently announced that his firm has cancelled the Cold-Trol Co. contract for distributorship of the Loudon automatic ice cuber.

The Cold-Trol Co. had an exclusive franchise for the distribution of the Loudon ice cuber for all states East of the Mississippi.

All orders for the Louden ice cuber from the East will now be handled through the Loudon headquarters in Minneapolis, the company said.

Loudon also announced that it recently appointed the following factory agents to handle the distribution of the automatic ice cuber in part of the territoy formerly served by Cold-Trol:

Douglas Strebel, serving southern New York and northern Pennsylvania; Eric Thormann, serving the New England states; S. R. Hill, serving Washington, D. C., Virginia, North and South Carolina; Charles House, serving Mississippi, Georgia, Alabama, and Louisiana.

Appliance Dealer Plays Up Service In Newspaper Ad

BUFFALO - Names that have come and gone in the automobile field were played up in a newspaper advertisement by Frank Meyers, local appliance and television dealer, to impress readers with the importance

of dependable, continuing service. "Where are they today?" asked advertising copy. "Locomobile, Marmon, Moon, Essex, Liberty, and more than 200 other automobiles of 25 years ago. Who services these cars today? Nobody!"

The advertisement went on to point out that Meyers maintains a 33-man service department.

"It's common sense to buy where you know you'll get service during all the years ahead," the advertisement stressed.

EP IN TOUCH WITH

official organ of the British rigerating Industry incorporates the original British Journals: "Cold age & Produce Review" and "Ice Cold Storage." Now in its 54th

ar, "Modern Refrigeration" gives the latest reliable technical and \$4.00 A YEAR BSCRIPTION, POST FREE

Send for a free specimen copy

MODERN REFRIGERATION, Empire House, St. Martin's-le-Grand, London, E.C.1, England

Refrigeration Equipment Users Visit Copeland Plant Via Chartered Bus and Courtesy of J. M. Oberc

SIDNEY, Ohio-More than a score of Detroit contractors and users of refrigeration equipment were guests of Copeland Refrigeration Corp. here during a two-day "junket" sponsored by J. M. Oberc, Inc., Detroit parts wholesaler and Copeland distributor, who chartered a bus to make the round trip between Detroit and Sid-

Leaving the Oberc store at a fairly early hour, the group arrived in Sidney in time for lunch. After that they were taken on a conducted tour of Copeland's compressor plant and thence to the final assembly plant where the compressor bodies or sealed units are assembled on the base with the condenser.

Following cocktails there was a dinner. Harry Thompson, president of Copeland, welcomed the group to Copeland, after which J. M. Oberc told the contractors that "we have the finest showroom in the country and we want to help you sell your

"I would also like to see independent contractors work with reputable independent wholesalers on the problem of financing sales," he added.

Frank Gleason, Copeland vice president in charge of sales; Charles Curtis, vice president in charge of manufacturing; and Oskar Buschmann. vice president in charge of engineering, also addressed the group.

Some current development projects now underway that may soon be released to the trade were revealed to the group by Buschmann.

Dale Bodine, service manager, told the contractors that Copeland's new parts manual is nearly completed and will shortly be published, and also gave for the first time details of a new parts merchandising plan.

Replacement parts will be packaged in attractive cartons bearing the Copeland colors-orange and black-for sale through parts wholesalers only, Bodine explained.

Rudy Berg, assistant sales mana-ger, "emceed" the luncheon and dinner and was in general charge of arrangements for Copeland, with the assistance of other factory personnel and field representatives.

Making the trip were Oberc, Ben Pozniak, Phil Padgett, and Ralph Yule of the Oberc staff, and following guests: Harold Ackerman, Herman Blair, Victor Buch, Joe Clark, Art Craddick, Al Foster, Leo Gage, Charles Heemstra, Wm. Jeffrey, M. Maksym, Alex Madsen, Alex McGhie, George Murphree, A. R. Norred, Carl Owen, Henry Pascoe, James Perry, James Philp, Charles Purdie, Wm. Schemers, Cleo Westerfield, and Jack

The contractors group in Detroit had also invited Ed. Wright of Youngstown RACCA representative.

District Representative

NEWARK, N. J.-McIntire Connector Co., manufacturer of "DFN" dehydrators, filters, strainers, and allied equipment



Thomas H. (Red) Hart as district representative for the Southeast territory, with headquarters in Atlan-

frigeration,

pointment

for mechanical re-

announced the ap-

Thomas H. Hart Hart has been associated with the

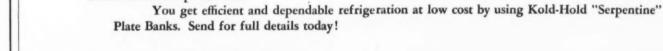
refrigeration and allied industries for many years. He has been an instructor in air conditioning, was for 13 years a sales engineer for Detroit Lubricator Co., and was chief engineer for Buckeye, Inc., National Fan & Blower Co., and The Warren Co.

Lavender's Appointed Sweden Dealer

SEATTLE - The Sweden Freezer Mfg. Co. has announced the appointment of Lavender's Refrigeration as the authorized Sweden dealer in the central Washington area, with headquarters in Wenatchee.

Founded in Wenatchee in 1940 by John Lavender, as a commercial refrigeration concern, the firm has steadily expanded its facilities under his guidance. Lines presently carried include Weber, Lipman, and McQuay.





possible easy installation almost anywhere by merely connecting to

your main refrigerant line. As Kold-Hold Plate Banks have no internal tubing or piping, their

weight per square foot is extremely low. Think of what these facts mean to you in lower

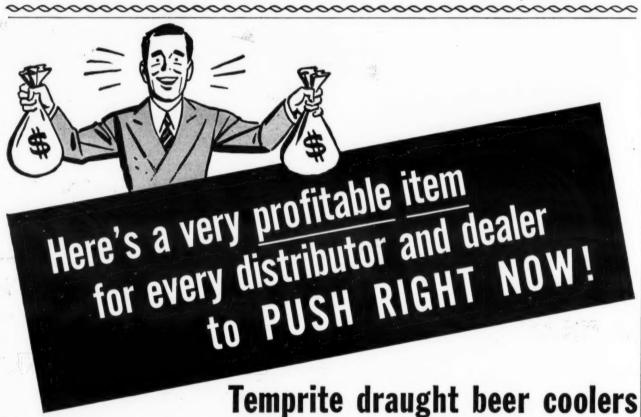
Kold-Hold Plate Banks, there are no extras to buy, simple fittings make



They'll Do It Every Time By Jimmy Hatlo



Do You Have 'Both Feet On The Ground'?



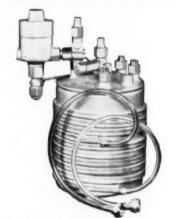
lead the way to HOT volume in HOT weather!

Warm weather boosts tavern beer business but at the same time reduces the efficiency of many existing draft beer refrigeration systems! And any tavern owner, inconvenienced by equipment which cannot properly carry hot weather loads, will naturally consider reconditioning or replacing existing equipment. This is the time to push TEMPRITE draught beer coolers and dispensing units! A TEMPRITE unit will handle hot weather demands to perfection!

TEMPRITE CORRECTS COMMON DRAUGHT BEER TROUBLE

Warm beer, foamy beer, waste beer, unpalatable beer and slow service result in loss of money, and even more important, loss of customers who are dissatisfied. TEMPRITE cooled draught beer is RIGHT from the beginning to the end of every keg.

BIRMINGHAM, MICH.



High refrigerating efficiency, small size and special beer dispensing design, make Temprite Beer Coolers ideal for either replacement purposes (where condensing unit is available) or completely new installations.

"Be right with Temprite"

TEMPRITE PRODUCTS CORPORATION P.O. BOX 72-A, EAST MAPLE RD.
BIRMINGHAM, MICHIGAN Send me details on Temprite Beer Coolers, which I understand are available for immediate delivery.

NAME.

COMPANY.

STREET.

P.O. BOX 72-A, EAST MAPLE RD.

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"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Journeymen Pose Question

UNSUCCESSFUL ATTEMPT of a group of contractors in Detroit to have the city license refrigeration journeymen points up a basic problem, although not a new one, for the industry.

Licensing of journeymen, it was argued by backers of the measure, would improve the quality of workmanship and generally raise the standards of the industry.

That there is a need to better some of the workmanship at the installation and service level cannot be denied. Insufficient or poor training and supervision leave much to be desired in some jobs.

The contractor who cuts all possible corners and permits cheap and shoddy workmanship just to get the order must share in the responsibility for this condition. So must the customer who refuses to pay a fair price for a good job.

Essentially it would seem to boil down to an educational problem for the entire industry. The employe must be trained to install and service equipment properly; the contractor must improve his selling methods to get a better price, and the customer must be educated to recognize the savings that a good installation will give him.

This important problem should be, and can be, solved by the industry itself instead of placing it in the hands of the government. The American philosophy of "there oughta be a law" has filled our statute books with innumerable regulations, many of which are unenforceable, many more, even, that are forgotten.

So let's handle this problem ourselves.

Now That Wages Are Frozen

AS A BOON to mankind, the art and science of quick-freezing is one of the most notable advancements made in many a year. It has brought garden-fresh fruits and vegetables to our dining room table in the middle of winter, exotic foods and tid-bits to the corner grocery and cross-roads store. Yet its impact on the dietary habits of this and other nations is really only at the beginning stages.

Up to now quick-freezing experts have almost exclusively concentrated on food. There's absolutely nothing wrong with that, of course, but a little imagination devoted to the possibilities inherent and implied in the process will reveal horizons that few have dared to dream of, let alone explore.

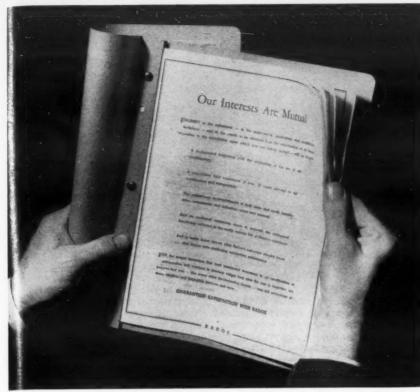
For example, Paul Reed, who has done so much to educate our refrigeration mechanics, claims he's heard of an industrial tycoon that uses the quick-freezing process to help smaller manufacturers.

This particular company generates its own electric current, and as a consequence has conducted considerable research and numerous experiments in the production and application of high pressure, high superheat steam. Today this plant employs 2,000-lb. steam superheated to 1,000° F. Power and efficiency of turbines are greatly increased while costs are drastically reduced.

Boiler equipment to duplicate this feat would be prohibitive in cost for the small manufacturer so the tycoon has devised a means to pass along the advantages and savings his company has achieved. He simply condenses the super-steam, quick-freezes it, and sells it is gallon cans. Then the small manufacturer merely has to re-heat the frozen concentrate to 1,000° F. and he's all set to go.

If this be true, and who but a steam engineer could doubt it, the freezing expert should give free rein to his imagination.

A large-scale operation might include freezing the whole Korean situation until the United Nations are properly equipped to handle it. By the way, whatever became of the freezers those government officials acquired a few years ago, anyway?



NEAT, COMPACT PROPOSAL is offered to Radoe Refrigeration Co. prospects when bidding on a job. Folder contains all pertinent facts the prospect needs plus some goodwill-building information. The entire format is designed to build prestige.

Business-Like Approach

The Difference In Getting a Contract and Losing a Job May Be In the Initial Proposal

DETROIT—"Other things being equal, our special proposal form often means the difference between getting an important contract or losing out with our bid."

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Thus, the expense of using the form is more than justified, believes Lou Radoe, who operates Radoe Refrigeration Co., Curtis distributor

"We don't use it on every job, of course, just the larger ones and those ywe are especially anxious to get because of the prestige value," he adds.

Radoe's proposal form consists of an embossed "panel" folder of light blue to permit the proposal sheets themselves to be clipped inside, as shown in the accompanying photo.

Printed on the cover are the words "Proposal for" just above the panel. Name of the prospect is typed on a separate sheet of paper and pasted in the panel. On the lower part of the cover is printed: "Submitted by Radoe" followed by the address and telephone number of the firm.

Inside sheets are attractively printed in blue on a thin paper of good quality. Thin paper is used so carbon copies of the proposal form can be easily made.

"When we hand our proposal to the prospect, he realizes that we are not a fly-by-night alley shop," Radoe explains. "He's impressed with the fact that we're operating in a business-like manner."

A typical proposal for an air conditioning installation consists of six sheets. The first carries in large type the heading "Our Interests Are Mutual," and goes on to state:

"Inherent in the equipment—in the engineering, application, and installation technique—and in the results to see obtained from the coordination of all these requisites to the installation upon which you are herein quoted—will be found:

"A background with the origination of the art of air conditioning;

"A cumulative field experience of over 10 years devoted to air conditioning and refrigeration;

"The satisfactory accomplishment of both large and small installations, commercial and industrial, usual and unusual;

"And an undiluted continuing desire to maintain the undisputed leadership reflected in the really notable list of Radoe's customers;

"And to make better known what Radoe's customers already know... that Radoe sells continuing satisfactory performance.

"For the proper insurance that your anticipated investment in air conditioning or refrigeration will continue to produce values long after the cost is forgotten, we suggest that you—like many other discriminating buyers—take full advantage of these tangible and intangible services and have—guaranteed satisfaction with Radoe."

Second page provides spaces for designating the particular job this proposal is for, name and address of purchaser and/or buyer, and name of person submitting proposal.

Actual specifications are shown on the third and fourth pages, while the fifth page gives details of the guarantee. Last page provides space for the

Plastic valve shoe

pressure forces shoe tightly against seat for complete shutoff No chatter in

purchase price, terms, and acceptance signatures.

All these pages have most of the pertinent data already printed on them so the contractor merely has to fill in the blanks. The specifications pages, for example, cover the following: "scope of work, refrigeration piping, water and drain connections, controls, electric, permits, sheetmetal installation, registers and grills, outside air connection, heating, insulation, workmen's compensation, working time, final test, and adjustments."

The guarantee contained in the proposal booklet is very specific. It reads in part:

"To cool such conditioned spaces to an average temperature not exceeding 80° F. and to produce an average relative humidity not exceeding 50% when the outside air temperature does not exceed 95° F. dry bulb and 75° F. wet bulb when the total heat introduced and generated within the spaces is that originating from the natural transmission through enclosed walls and from the following sources:

"(a) Space—
"(b) People—
"(c) Outside air (c.f.m.)—

"(d) Lights— "(e) Heat-producing equipment in conditioned space—

"The above guarantee for this equipment is based on the understanding that all doors, windows, passages, and openings, into the space conditioned will be kept closed and made reasonably tight by the Purchaser to prevent undue loss of conditioned air; doorways may be opened for normal passage. The Purchaser shall also shade all glass areas exposed to the direct rays of the sun."

Millman Made Baker Operations Manager

SOUTH WINDHAM, Me.—Frederick W. Smith, president of Baker Refrigeration Corp. here, has an-

nounced the appointment of Clinton Millman to the newly-created post of manager of operations.

In his new capacity, Millman assumes charge of all manufacturing functions for all of the company's plants. These responsibilities in-

Clinton Millman sponsibilities include the direction of all phases of production, design engineering, quality control, standards, methods and process engineering, material control and scheduling, purchasing,

Smith stated that rapidly expanding refrigeration production coupled with a stepped up war production program resulted in the decision to strengthen the organization.

traffic, and shipping.

Millman, whose experience includes over 30 years in manufacturing, particularly refrigeration, has been associated with Baker for the past three months in a consulting capacity. From 1937 to 1950, Millman was

From 1937 to 1950, Millman was West Coast manager, general sales manager, vice president, and general manager of Ranney Refrigerator Co. at Greenville, Mich.

Starting in the refrigeration business with Frigidaire on the West Coast, Millman left the position of household sales manager with that company in San Francisco to start his own refrigeration contracting business in the 1930's. During the past year, Millman has operated his own management and engineering consulting business, working with leading refrigeration manufacturers.

Millman's efforts at Baker will be "primarily directed toward aligning facilities and planning to see that present war contracts and others now being negotiated, are manufactured without causing Baker customers to suffer for lack of quality air conditioning and refrigeration products to sell," the company said.

Sealed Unit Parts Has Terminal Repair Method

NEW YORK CITY—A "money-saving" offer by Sealed Unit Parts Co., Inc. to repair external terminal leaks from the outside on most refrigeration sealed units was announced recently.

Sidney Weiner, secretary of the firm, said a new method takes three minutes to repair each unit at a charge of only \$1.25 per unit.

"This method has been perfected," he said, "to correct any original defect, by a new simple process. It takes only one minute to fix each terminal and is guaranteed leak-proof for the life of the unit."

The new Sealed Unit Parts Co. method applies to Part No. 1157 on Kelvinator, Norge, Crosley (1942 and later), and to Part No. 11515 on Tecumseh, Chieftain, Philco, Stewart-Warner, Gale, Murphy, Schaefer, and Westinghouse (all models).

THESE VALVES STAY CLEAN IN DIRTY WATER!





DEPENDABLE WATERREGULATING VALVES PROVIDE SIMPLE, TROUBLE-FREE CONTROL

A quick look inside A-P's water regulating valves tells you why they are the valves you need for trouble-free operation of your cooling system. They're compact — simple to install. Operating range 65 to 200 p.s.i. Freon 12. Regulate cooling water for compressors up to 42 hp. An extra large bellows is your assurance of extra-long life. Because operation is not affected by inlet pressure — valve action is quiet and positive every time — no chattering.

Find out about A-P's trouble-proof water regulating valves today. Remember, it's A-P's — the only valves on the market with "the self-cleaning seat" that stay clean — even in dirty water. Write for Bulletin R-6.

A-P CONTROLS CORPORATION

EPENDABLE Controls

V-block seals water in main valve body.

spring or operating bellows. Leakproof forged-brass body.

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Stocked and Sold By Good Refrigeration Wholesalers Everywhere • Recommended and Installed By Leading Refrigeration Service Engineers



Condensing Units

1/4 hp. to 40 hp.

Curtis Refrigerating Machine Division

Established 1854

og Company St. Louis 20, Mo.

of Curtis Mai 1912 Kienlen Ave.

Bopp Tells Servicemen How To Get Free Help On Their Chemical Problems from Ansul

KALAMAZOO, Mich.-How refrigeration servicemen in trouble can get quick and free technical advice on problems caused by chemical action was outlined here recently by John Bopp, chief chemist of the Ansul Chemical Co.

Bopp, who has taken over Dr. Walker's duties in refrigeration research for Ansul, spoke to the Michigan Association of the Refrigeration Service Engineers Society on "Chemical Problems in Refrigeration."

He told the servicemen that the benefit of Ansul's accumulated experience and research is available to answer their three most troublesome questions when faced with foreign matter in a refrigeration system. These questions are:

- 1. Where does it come from? 2. How can I get rid of it?
- 3. How can I stay rid of it?

"Two heads are better than one in solving these problems," Bopp said. "Give us your experienced and we will give you our knowledge. That knowledge is based on the experiences of other servicemen in the field and our own research investiga-

INFORMATION NEEDED FOR STUDY OF PROBLEM

To get this service, the serviceman should supply as much information and as large a sample of the solids in the system as possible.

"If possible," Bopp said, "tell us these things:

"1. Manufacturer of the unit.

"2. How long the unit has been in service.

The refrigerant used. "3.

Brand of oil and how long it 14. was in use.

"5. Previous service history. The situation as you found it. "6.

What you have done. (Don't afraid to admit that you did something wrong. Our only interest is to get at the facts and help you with your problem; not to condemn you.)

The normal head pressure, the "8 head pressure at the time of your

call, and the temperature at the head.

"9. Collect deposited solids, indicating from where in the unit they were taken. Save the oil and refrigerant charge in the event that it may be needed.

"This service is gratis to men in the field," Bopp reiterated. "We will send you a report in about three days. Usually we will start analyzing your sample the very day we receive

TROUBLES FALL IN TWO CATEGORIES

In his talk, Bopp noted that refrigeration problems fall into two major classes: mechanical and chemical.

Chemical problems he defined as those originating from the refrigerant, lubricating oils, methanol, driers. and materials derived from other sources.

Problems derived from the refrigerant, according to Bopp, are:

1. Mechanical blockage due to ice. He pointed out that this is more important in methyl chloride than in 'Freon." He said it shows up in the expansion valve and the capillary tubes.

2. Decomposition due to moisture. You start to get moisture corrosion when moisture amounts to .05 by weight in methyl chloride and "Freon" and .01 by weight in sulphur dioxide

3. Mechanical blockage due to corrosion products. To determine whether this has occurred, he suggested, check the liquid line to see how much sediment is there. If that doesn't show it, try a filter or drier.

4. Reaction to metals. Here Bopp re-emphasized the point that methyl chloride has a violent reaction to aluminum that is extremely dangerous. He labored the point, he declared, because an unprecedented number of cases had been reported to the Ansul laboratory in the past few months.

This is what to do if you find a system containing aluminum parts that has been charged with methyl chloride. It can be recognized be-



CHEMIST SPEAKS: John Bopp, chief chemist for Chemical Co. Ansul made one of his fire appearances before refrigeration serviceme when he addressed the Michigan Association o the Refrigeration Service Engineers Society Kalamazoo recently.

cause the methyl chloride will ignite and smoke when exposed to air.

First, pump down the refrigerant into the liquid receiver. Then take the unit out into a vacant lot as far away from other people as possible and blow it out. Add hot water and soap or methyl alcohol a little at a time (putting it in too fast may cause an explosion) and clean the coils out thoroughly.

When this is done and the coils are dried, the evaporator should be pressure tested. Corrosion can sometimes weaken the walls of the tubing to such an extent that they will be unable to withstand normal pressure. Decomposition due to heat.

Toxicity. This, in particular reference to methyl chloride, is not the problem it was a few years ago. This is due mainly to the fact that this refrigerant is no longer being used in large multiple installations.

He noted that a few years ago, some Chicago apartment houses had refrigerators from every apartment hooked on to a single system, that, in some cases, contained a charge of 300 lbs. of methyl chloride.

CITES HAZARD INVOLVED

This was hazardous, Bopp said, because a leak in any one of the evaporators would mean that the entire charge of refrigerant could be loosed in one apartment and endanger the lives of the inhabitants.

Difficulties due to oils are these, Bopp said:

1. Decomposition. Keeping head pressure and temperature down to normal ranges is very important, he emphasized, because if the compressor operates at higher than 250° F. you are going to get oil decomposi-

tion. 2. Reaction with the refrigerant. At high temperatures, oils have a definite reaction with "Freon," he said. They form an acid that chews up the copper. Again here, the way to avoid such corrosion is to keep head pressures down.

Wax. This gives difficulties at the expansion valve and capillary tubes. There is no need to have this trouble today, Bopp said, for good refrigeration oils are properly refined to reduce the formation of wax. If you have trouble with wax in the oil, don't use it any more. Get one that will not give you any trouble, was his

4. Congealed oil in the cold spots. When congealed oil gets into the compressor, it reduces the efficiency of the unit.

5. Copper plating. Unsaturated hydrocarbons are the cause of copper plating. However, improved refining of the oil has reduced this problem so that it does not cause much trouble any more.

The use of methanol (speaking of any liquid dehydrant containing methanol) is also the source of chemical problems, Bopp stated. Methanol, he explained:

Is corrosive in quantities larger than 1% by weight as compared with

the refrigerant. In answer to a ques tion from the floor, Bopp said that 5 cc of methanol to 20 oz. of "Freon" would be well under the 1% maxi mum where corrosion would start But, he pointed out, the trouble is you don't know, usually, how muc methanol others might have put int the system before you got to it.

2. Reacts with aluminum and iro parts in the system.

3. Removes insulation in hermeti units. He qualified this by sayin that it cannot be proved by chemica analysis, but the experience of or large manufacturer of hermetic unit indicates it strongly. He noted the this manufacturer found methanel present in every case where insula tion had been eaten away and hall never found such deteriorated insul: tion where methanol was not presen

4. Reacts with calcium chloride

5. Preferentially removed b driers. If methanol is introduced int a system where a drier is installed you will get no good from it, becaus the drier will take it out.

6. Induces copper plating.
7. Removes the "Gasoila" coating

in the compressor. This danger is rather remote, however. Driers can be troublesome, too,

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Bopp stated, by introducing into the system: 1. Fines of calcium oxide, calcium

chloride, calcium sulfate, silica gel, and activated alumina.

Fibers from drier felts. Materials derived from other

sources include: Molding sand.

2. Graphite used as a coating for castings.

3. Acid soldering fluxes.

one compressor.

4. Copper oxides. Metal turnings of iron, copper,

and brass. 6. Iron filings and bearing grindings. He said that a whole pint of such filings were onced removed from

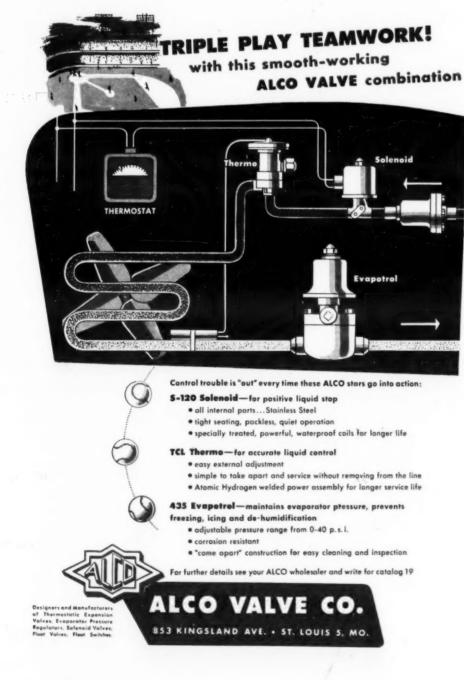
7. Material from disintegrated

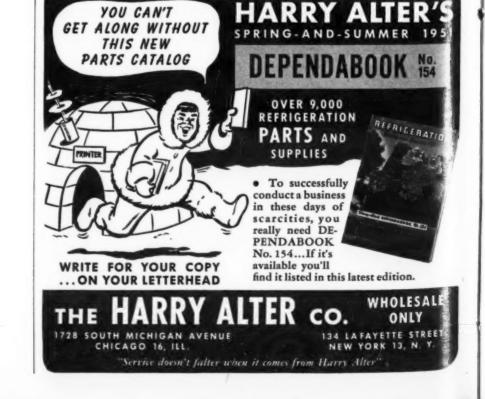
OTHER FOREIGN ITEMS FOUND

These are just the more common foreign matter, Bopp said. Such strange items as bumble bees and cigarette butts have also been found.

In replies to questions from the floor, Bopp commented that it is true that magnesium and zinc will also give the same general reaction with methyl chloride that aluminum does. However, he pointed out, these metals are seldom found in refrigeration systems and, in his experiences at the laboratory, he has never found anything but aluminum in methyl chloride sludge.

Asked what causes oil to foam, he said that the release of the refrigerant from the oil will do this. He noted that this occurs usually when the compressor is first started up. The pressure drops and the refrigerant separates out from the oil. The action is the same as that which occurs when you shake up a bottle







Checking on the display pre-packaged meats in the open selfservice double-duty case shown at the Super Market Institute show by Bally Case & Cooler are B. O. Brooks (left), manager of Armour & Co.'s merchandising service division, and his assistant, G. W. Sim.



Mrs. Margaret Allen, wife of Weber's treasurer Mark Allen (left) seems pleasantly surprised as Al Serpa, regional manager, explains how the new open "Display-Rite" merchandiser not only keeps ice cream well below 0° F., but permits the market to display dessert toppings, cookies, etc., at the point of sale. In addition to seven refrigerated divider plates, this self-contained case (with 34-hp. unit) has an extra plate directly above the low temperature section. Case can also handle frozen foods.



New refrigerated produce case featuring high angle display and adjustable shelves was featured by McCray, arousing the interest of supermarket operators. J. W. Hart (second from left), president of McCray, gives details of the new case to Mr. and Mrs. Jack Gore of Midwest Stores, Inc., Des Moines, and T. J. Murphy (right), McCray regional man.

Careful Preparation, Strategic Arrangement Of Self-Serve Meats Stimulate Impulse Buying

CHICAGO - "The housewife has come to regard the self-service meat case as a suggestion box. She welcomes new ideas, and she is attracted by items that look different."

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How one independent chain operating 25 stores in Kansas capitalizes on that approach was outlined for members of the Super Market Institute at its 14th annual convention here by Ray E. Dillon, Jr. of J. S. Dillon & Sons Stores Co., with headquarters in Hutchinson, Kan.

These 25 stores range from single locations in small agricultural communities of 1,500 people to our four stores in the city of Wichita, with a population of better than 200,000," Dillon explained.

'We draw from a good size trade area. To draw people such long distances, we spend a great deal of time and effort in planning and building our stores so that they will have the most attractive appearance.

"We believe we must have the same fine appearance inside the stores, particularly the products in our self-service meat cases where we do an extra special job of merchan-

WELL-TRIMMED, NEATLY PACKED MEAT PROMPTS IMPULSE BUYING

"It takes well-trimmed, tightlywrapped meat packages to stimulate that impulse buying we talk about so much these days.

"Out in Kansas our customers know meat, and when steaks, roasts, and the rest of our fresh meat products have excessive bone or fat, our customers do not pick them up. We prefer to trim carefully the first time, move the product, satisfy the customer, and eliminate the additional expense involved in converting or rewrapping.

We try not to just talk about trim, tight packages, freshness control, and appearance, but actually put all that into the packages in our meat cases.

'We use a good rigid board-not just for something to seal against, but to make a package look better hesitate to remove immediately a package that has become discolored or lost its good appearance.

"We know that any package of fresh meat that fails to move within its code date time was not originally cut, trimmed, and wrapped properly, and should be removed and reworked so that it will sell right along with the other merchandise.

CASE ARRANGEMENT CONSTANTLY CHANGES WITH CONDITIONS

"We are fussy about the appearance of our meat cases. Case arrangement is a constantly changing problem. Seasons, current prices, local meat preferences, whims of customers-these and many other factors must be considered.

"The direction of traffic flow in most of our stores is from left to right. So as a general practice we stock our cases beginning with ground meat at the extreme left end where the shopper hits it head on as she comes from the produce and bakery departments. This section usually includes two sausage items, three ground beef items, hamburger, chuck, and ground steak.

"Since ground meat is a low priced item, the shopper gets a good price impression at her first impact with the meat case," Dillon declared.

"This spot has results in good movement of ground meats which come basically from trimmings that we are anxious to move.

BEEF AND PORK TOGETHER OFFER COLOR CONTRAST

"Roasts on which there is good dollar volume are arranged in the second section. Beef and pork are displayed together for good color contrast and are arranged by cooking methods. The psychology of putting roasts here is to lead the shopper gradually into the higher priced items such as steaks.

"Next in our cases are variety meats. As you all know, variety meats offer quite a problem in packaging and display. We use crinkle paper to absorb the juices and keep nackages neat

Model P-30

Model P-45-G

(Self-Contained)

on the label steps up sales and seems to cut down the amount of handling.

"Poultry occupies the center section and is the dividing line between fresh meat and processed meats.

SHOPPERS PRE-CONDITIONED TO QUICK MEALS

"To condition the shopper's mind to quick meals before she reaches the luncheon meats, we have a section on salads and other delicatessen items. We started making these delicatessen products in the back room of our stores. The volume and profit warranted putting in kitchens in our newer stores.

"An outgrowth of this activity is the roasting of hams, roasts, and other cuts of meat and all kinds of poultry for special parties and for everyday sale in the meat cases. The meat is cooked in the larger oven and is sent to the party in one of the small electric roasters. By simply plugging in the roaster at home, the meat stays warm until ready to be

COOKING SERVICE KEEPS CUSTOMERS, IS PROFITABLE

"This special cooking service is an added touch in keeping satisfied customers for our stores-and it has been profitable.

"Experts have stressed the effect of light on the appearance and flavor of luncheon meats. We found that to be true, and consequently display all our luncheon meats face down. Our customers are accustomed to this and appreciate the fine appearance of the meat because we display this way. Now we're going to use the coverall label to make the packages more attractive.

"The next section of the case is taken up with other luncheon meat items, franks and sausages. Finally, cured and smoked meats occupy the right end of the meat department cases. Many of these are breakfast items, such as bacon and pork

"Now we all recognize that in a self-service meat operation there are particularly goes with self-service. We do not ages, marking the number of slices early part of the week, and the problem is how to display during these slow periods. Some operators with a long string of meats prefer to empty one or more cases during the slack period. That's probably all right as it probably impresses the customers that those cases are being

"We prefer to keep products in all the cases so we make most of the displays single layer and by close attention keep the bottom covered," Dillon said.

"Now, for increased business the latter part of the week we feature several meat items in our advertisements. We follow through with special effort in the store.

SPECIAL SIGNS POINT OUT ADVERTISED ITEMS

"For example, take pork loins. In the meat case we call special attention to those advertised loins by pointing them out with a large red plastic arrow reading 'As Advertised.' All the meat items featured in the advertisement are similarly marked by these red arrows. These become established 'hot spots' in the

"Other hot spots are established to step up the sale of slow movers. Like putting short ribs between two fast movers-hamburger and chuck roasts. Alert merchandising practices are so essential to successful operation of the self-service meat depart-

BONELESS CUTS CATCH FANCY

"Boneless cuts have captured the housewife's fancy in our stores. We started selling boneless cuts because our customers were unwilling to pick up fresh meat items such as sirloin which they thought contained excessive bone.

"In addition to full cuts of round steak, we merchandise rounds into boneless top and bottom rounds. Here's a way we maintained constant movement on prime ribs. Instead of cutting a 7-in. bone-in steak, we bone out the first three prime ribs. When cut thick, they are delicious for broiling, and we have established a very good demand for them. We bone and roll the remainder of the rib for roasts.

"This is a practice that CPR-25

now prohibits.
"We sell almost all of our sirloins

as boneless cuts. Before we started this practice, sirloin steak was a slow mover in our supermarkets.

"Another boneless feature we call the 'Holland Special.' It's flank steak rolled with suet and held in place by a skewer. They are wrapped two or three to the package. The red meat around the white suet is a real eyecatcher.

"We have stimulated sales of half pork loins by displaying the half loin with two or three chops removed and placed on top of the loin. This is a two-meal suggestion item and a good volume item.

"Our meat managers are encouraged to try any new idea they think of. If it works in one store, we follow up with the idea in other stores. We are always trying something and checking the results," Dillon com-

ATTENDANT HELPS THOSE WITH SPECIAL REQUESTS

"Then there is the problem of shoppers wanting special cuts or the customer new to self-service needing the assurance that special cuts are available if she cannot make a selection from the case.

"Signs on top of our meat cases tell the shoppers to ask the attendant if they want any type of special cut. An attendant is out front at all times watching the cases and the customers. If anyone is in a dilemma, he offers his help.

"When we open a new store, our best meat man is out front to help customers and he stays on the job for the first six months of the store's operation. We feel that customers are entitled to what they want and we make every effort to see that they

Super-Cold Names Mathews As Asst. to Sales Manager

LOS ANGELES-Super-Cold Corp. has announced the appointment of Ray L. Mathews as assistant to the general sales manager.

Through Mathews, the company expects to make the general sales office an effective source of informaselling aids for all



Gives You Grad-U-Matic Air Conditioning and Life-Time Porcelain Finish OR STAINLESS

Top Quality Refrigerators - 51 Different Models

FEATURING

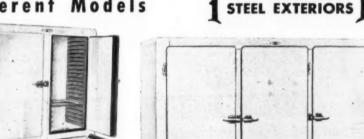
1. Porcelain or Stainless Exteriors 2. Welded White Porcelain

4. Sealed-In Fibreglass Insulation 5. Solid or Triple Thermopane

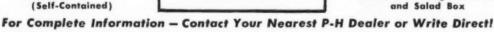
6. Sizes from 20 to 90 Cu. Ft. 7. Underwriters Approved

Interiors 3. Welded Steel Frame

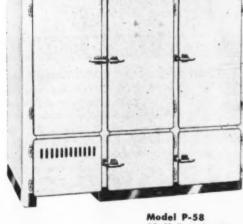
Glass Doors



Model T-42 Dough Retarder and Salad Box







(Self-Contained)

DAIRY-DELICATESSEN CASES . PASS-THRU CABINETS . DRY BEVERAGE COOLERS . DOUGH RETARDERS . FLORIST CABINETS . WALK-IN COOLERS

What's New

When requesting further information on new products, please use "Information Center" form.

Wooster Has Versatile Beverage Dispensing System



KEY NO. A-610-

WOOSTER, Ohio-A self-contained beverage dispensing system that can include various combinations of elements as desired is being offered by the Wooster Brass Co. here.

The self-contained unit, refrigerated by a hermetically sealed 1/3-hp. compressor, is housed in a stainless steel cabinet. It is equipped with faucets, each of which will serve three different types of bever-

Called the Geyser Select-Flo beverage dispensing system, the unit is

claimed by the manufacturer to save time, cut soft drink costs, and make it possible to serve more customers with fewer employes in less time.

It includes three pressure syrup tanks readily accessible for changing or refilling, a sealed Geyser carbonator, and either straight shank or gooseneck style faucets.

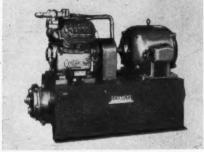
The syrup tanks are available in 2 and 5-gal. capacities equipped with snap-on couplings. Gauges and regulator include a single high pressure regulator and gauge registering 250 lbs., single low pressure regulator and gauge registering 50 lbs., or a duplex regulator assembly of these two units plus a 3,000-lb. gauge.

The carbonator is fully automatic and provides up to 60 gals. of carbonated water per hour. It is completely sealed and of all stainless steel construction. A direct drive pump is used. The carbonator sits on a heavy duty cast aluminum base and measures 14 by 11 by 16 in.

The faucets are made entirely of stainless steel and are available either with or without the needle stream thumb valve on the face. Pushing the handle forward produces one drink, pushing it backward another. The thumb valve provides the third.

Both stainless steel and copper tubing and fittings are available.

3 Direct Drive Models Now Standard In Schnacke Line



KEY NO. A-611-

EVANSVILLE, Ind. - Schnacke, Inc., here announced that its 1951 standard line of refrigeration and air conditioning compressors now includes three direct drive models operating at 1,750 r.p.m. which formerly were produced only on special

The company said it also added as standard a line of condensing units from 30 to 60 tons which likewise were previously made on special order only.

The three direct drive compressors are designated models ATD-15, AFD-30, and AED-60. All are now available as complete condensing units.

According to Schnacke, these models were designed for their top capacity but are also used at slower speeds.

The company's design of suction and discharge valves, steel backed alloy replaceable bearings, force feed lubrication, bellows-type seals, proper metallurgy, and "exceptional" ance is said to "assure satisfactory of Schnacke compressors at speeds of 1,750 r.p.m.-either direct

It is claimed that tests made at

'Heat-X' Longitudinal Fin Tube Now In Production

-KEY NO. A-613-

BREWSTER, N. Y .- The "Heat-X" longitudinal fin tube is being pro-



duced by Heat-X Changer Co. here to provide a high rate of heat trans fer of liquids an gases with min mum of pressur drop and a max mum of space sa

ing.
The Heat-X lo gitudinal fin tu is available wi one or two finn annular with outer tub s ranging from in. to 21/8 in. and inner tubes 1/4 to 34 in. Other materials may be obtained on spe-

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cial order. Tubes are available in finned lengths up to 10 ft.

New Dehumidifier Added To Lonergan Mfg. Line

---KEY NO. A-614---

ALBION, Mich.-Lonergan Mfg. Co. here has added a new dehumidifier to its line of oil and gas space heaters and ventilating fans.

The unit is 22-5/8 in. high, 16 in. long, and 12-3/8 in. wide, weighing 62 lbs. Space is provided in the cabinet to hold a standard 10-qt. condensation bucket and the unit is equipped with an 8-in, blade aluminum intake fan.

The unit is said to dehumidify space up to 8,000 cu. ft.



-KEY NO. A-612-

3,300 r.p.m. "indicate valve action

and pumping capacity were efficient. No noticeable increase in vibration

or noise was indicated and it was

also noted that there was no evidence

Pointing out that Schnacke com-

pressors were designed in 1946 for

1,750 r.p.m. speeds and have been

used successfully for years at motor speeds with belt drive," the company

stated that "today the trend is to

higher speeds and they are not ac-

cepted but are established as a mod-

New General Refrigerator

Features Inner Door Shelf

of exceptional wear.'

ern development."

LOS ANGELES-An inner door shelf is one of the features of the new model of General Air Conditioning Corp.'s 4 1/2-cu, ft. refrigerator. the company announced.

The new unit, model No. A-450, General's range-refrigerator combinations and other refrigerators, is now electronically spot welded, it was indicated.

The Los Angeles firm also reported that it has just completed an extensive plant expansion which includes an entirely new metal treating and paint operation designed and installed under the supervision of Dupont and Devilbis en-

The company added that it has acquired additional acreage adjacent to its plant for contemplated expansion of its manufacturing facili-



for all water cooling use Filtrine -sell more condensing units

"DO Rating" Orders are Vital . . .

All Federal Agencies . . . Air Force . . . Army . . . Navy . . . Marine Corps . . . know that Filtrine products meet government specifications.

COOLERS FOR MESS HALLS - CAFETERIAS

Sell your own condensing unit ... with coolers backed by Filtrine's 40-year dependability. 1. Government and general acceptance for high efficiency-dependability-20-year life construction. 2. High capacity-super storage. 3. Handsome exterior (all stainless steel or Duco with stainless trim). 4. Equipped to suit with top and/or side shelves. 5. Bubblers, glass-fillers, front, back or all sides. 6. Can be "Taste-Master" equipped to banish chlorine and insure sparkling water.





COOLERS FOR X-RAY & PHOTOGRAPHY

Sell your own condensing unit . . . with these Filtrine coolers pre-approved by military and V.A. medical procurement offices. Signal Corps, Air Force, etc., for X-Ray darkroom and photo-lab installation. 1. Dependable water of correct température for film processing. 2. Large storage for heavy duty and emergency requirements. 3. High efficiency, economy operation—20-year life construction 4 mounted with stainless steel work-table top; also under-counter models. 5. Filters (extra) prevent scratched and pinholed negatives.



REMOTE COOLERS FOR ALL USES

Sell your own condensing unit . . . with Filtrine coolers suitable for new and replacement installation everywhere: barracks, military depots, mills, schools, post offices. 1. Capacities 5-800 g.p.h.-storage 7-300 gallons. 2. High efficiency-20-year life-span. 3. Insulation-2" hydrolene-sealed corkboard. 4. Filters and Rectifiers/Dechlorinators available for all sizes.

PACKAGED CIRCULATING CHILLED WATER SYSTEMS

Sell your own condensing unit . . . with complete Filtrine systems for circulating drinking water in offices, hospitals, industrial plants . . . for processing water as low as 34°. 1. Completely packaged for streamlined engineering, quick installation. 2. Capacities 5 to 400 g.p.h.—Storage 5 to 150 gallons. 3. Equipped with heavy-duty pump. 4. Your condensing unit factory installed. 5. Insulation-2 inch hydrolene-sealed corkboard. 6. 20-year life construction. 7. Filter-Rectifier assembly (extra) to kill chlorine and keep water sparkling



Circulating Chilled Water System

Get our new "How to Sell DO Jobs" Write Dept. RF-1



MANUFACTURING COMPANY · BROOKLYN

"Water Coolers and Filters for 40 Years"



Angles

Channels Veg-Pan Handle

Base Trim

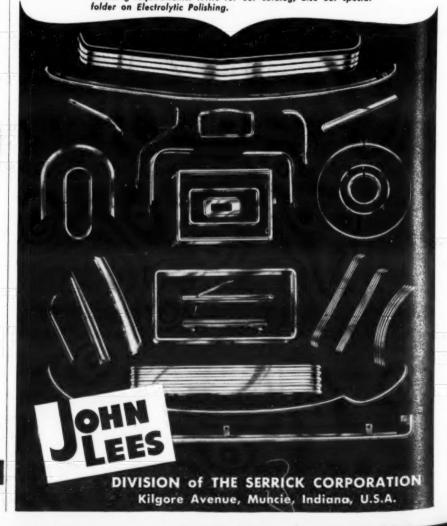
Throat Trim **Shelf-Frame** Assemblies

Flat Tops Decorative Trim

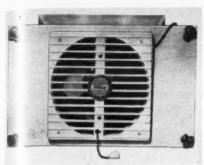
Tee Shapes Beads **Formed**

Sections

We will make recommendations and free estimates on your lding requirements. Write for our catalog, also our special



What's New (Cont.)



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Fasco "Porta-Vent"

'Porta-Vent' Requires No Wiring or Wall Switch

-KEY NO. A-615---

ROCHESTER, N. Y .- Newest addition to the 1951 line of Fasco Industries, Inc. here is a portable exhaust ventilator "easily installed in 95% of all windows"—both steel casing and wood sash types, according to a recent announcement.

The unit is known as the Fasco "Porta-Vent" casement window ventilator. According to the company, it requires no wiring or wall switch, doesn't interfere with window operation, and is weatherproof and insectproof.

An attached cord plugs into any 110-125-volt, 60-cycle a.c. outlet. A rubber-sealed door is closed when the fan is not in use. A pull chain controls the door and switch for fan operation simultaneously.

Equipped with an 8-in. blade, the ventilator is said to change the air completely in the average size room every three minutes, exhausting 405

Other features include an induction motor, baked white enamel finish on mounting plate and removable grille, and all-over inside grille with narrow openings for safety.

Model 861, replacing glass pane 16 in. by 111/4 in., and model 862, replacing pane 17% in. by 10% in., mount in steel casement windows with safety lugs and gasket, the manufacturer points out.

For wood sash windows, model

Carrier Introduces 4 **Improved Cooling Towers**

-KEY NO. A-616-

SYRACUSE, N. Y .- Four improved models of cooling towers for use with self-contained air condition-



ing units and other water-cooled refrigeration applications in the 5 to 15-hp. capacity range are an-nounced by Carrier Corp. here. Cooling towers

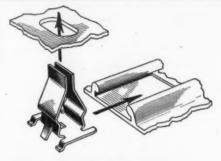
have proved particularly essential in areas where condenser water must be cooled and recirculated because of water

supply restrictions or expense, water disposal problems, or abnormally high water temperatures. The new models feature a built-in, two-bend, eliminator blade section which virtually eliminates overspray, thus reducing water consumption to a minimum, it was pointed out.

The 1951 models are an improved version of a radically new line of Carrier cooling towers introduced last year using a water turbine drive for the fan and spray system, for economy and simplicity of operation. This type of drive eliminates the need for electrical connections to the unit. Turbine bearings are supported on a film of water with no metal-to-metal contact, insuring long operating life and requiring no lubri-

An exclusive fill material of asphalt impregnated board, which is extremely light in weight, non-warping, and impervious to water, prevents the waterlogging and resultant increase in weight typical of conventional wood fill material. The casing is hot-dipped galvanized after fabrication for corrosion resistance, to permit outdoor installation remote from the air conditioning equipment itself.

The four models are designed for 5, 71/2, 10, and 15-hp. air conditioning



New Speed Clip Fastens Breaker Strip to Liner

-KEY NO. A-617-

CLEVELAND-A new Speed Clip used to fasten breaker strips to food compartment liners in refrigerators has been introduced by Tinnerman Products, Inc. here.

The clips are inserted into cavities molded into the underside of the strips. Feet in the base of the clip hold it in the desired position within the cavity.

With the Speed Clips properly attached, the breaker strip is first inserted in the "Dutch bend" of the cabinet. The resilient spring arms of the clips snap into elongated holes in the liner flange and provide a tight thermal seal.

The assembly line operation is thus speeded up. With the Speed Clips and breakers strips sub-assembled, they are brought to the assembly line as a single unit. Removal of the strip for servicing of the refrigerator can be done with no damage to the Speed Clip or the strip.

Made of heat treated spring steel, .014 in. thick, the clip is 2764 in. wide and 7/16 in. long. Arms of the clip are

Transafe Keeps Food Frozen Up to 12 Hours

-KEY NO. A-618-

TOLEDO-Owens-Corning Fiberglas Corp. has developed a low cost, light weight, Fiberglas-insulated corrugated container in which frozen foods may be carried safely up to 12 hours, without need of refrigera-

Known as the Transafe, the product consists of a standard, slotted, corrugated container whose top, bottom, sides, and ends are said to contain 1-in.-thick slabs of Fiberglas insulation.

The Transafe is expected to be widely used in the transportation of frozen foods from local distributing warehouses to retail stores, restaurants, hotels, clubs, and other institutions.

It also serves as a temporary back room storage facility for frozen food packages which may exceed the capacity of store display cases on heavy shopping days.

In addition it provides a safe container in which frozen foods may be carried by the retail store in unrefrigerated trucks for home delivery along with other items of general purchase.

Tests have indicated that the container, without pre-chilling, will hold frozen food at temperatures of -5° to $0\,^\circ$ up to six hours in an atmospheric temperature of $100\,^\circ$ and a relative humidity of 75%. In temperatures of 70 to 75° the period of effectiveness exceeds 12 hours.

The Transafe, developed with the aid of warehousemen, is made in a number of sizes. Two standard sizes are recommended, one to hold a single carton of 24 packages of frozen food and the other two cartons.



WORKER loads one of the Transafe cartons for storing frozen foods without refrigeration short periods of time. It is said to be effective for up to 12 hours.

The Transafe may be used and reused many times. After long service the outer carton when worn beyond practical use may be replaced with a new one. However, the Fiberglas insulation and the liners may be re-

The new product is light in weight, (the larger of the two recommended sizes approximates 5 lbs.) and is easy to handle. It is estimated that the 48 unit size will cost approximately \$1.75, according to the com-

Assembly of the Transafe is simple. The container manufacturer furnishes container parts, printed, scored, and folded to exact specifica-

sell more Room Air Conditioners at HIGHER PROFIT with LESS COMPETITION



ONLY REMINGTON PLUS-3 AIR CONDITIONING GIVES DEALERS THESE IMPORTANT SALES ADVANTAGES!

You're passing up easy-to-get profit if you aren't carrying Remington PLUS-3
Room Air Conditioners. No other line is so complete. No other line gives you such a full range of window and console models . . . air cooled and water cooled such range of cabinets. All models. walls . . . installed singly or in multiple units so you can sell most every type

★ Fast turnover! More to offer! Competitively priced!

Remington PLUS-3 Room Air Conditioners provide more than just cooling. Your customers get clean, filtered air, circulated without drafts, and at the proper humidity. Provision can be made for moderate heating unit . . . excellent for Spring and Fall days. Now you can sell year-round air conditioning.

Remember, too, with filtered air, dirt and pollen are removed . . . a boon to respiratory sufferers. That is why you'll find Remington PLUS-3 Room Air Conditioners in every country in the world . . . operating under every possible

Yes, Remington PLUS-3 Air Conditioners are fast turnover items . . . offer you many extra sales advantages . . . yet, are competitively priced.

★ Selling made easy and simple!

prospect from homes and offices to industrial plants.

To help you sell, Remington not only backs you up with National Advertising, newspaper mats, colorful folders, display and advertising material . . . BUT Remington offers a Special Comfort Selector, which makes selling easy. With this selector and a few basic facts any salesman can diagnose the air conditioning problem, and dial the size unit required. It's that easy! Write for a Remington Com-

fort Selector, and ASK ABOUT THE REMINGTON DEALER PLAN . . . TODAY!

Conditioning

HEALTH AND COMFORT FROM TEMPERATURE CONTROL PLUS 1. FILTERING 2. MOISTURE CONTROL 3. CIRCULATION JUST LOOK AT



DOCTORS DENTISTS **OPTICIANS** LAWYERS OFFICES SMALL STORES

SALESROOMS

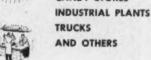
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DETROIT 26, MICHIGAN

Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

Adams Mfg. Issues Gas Burner Service Guide

-KEY NO. M-610-

CLEVELAND—What is claimed to be one of the first gas burner service guides available to the trade has been written and published by the Adams Mfg. Co. here, conversion burner manufacturer.

The book, called the "Gas Burner Service Guide," presents its service suggestions in chart form. It first gives the symptom, then the possible causes, and finally, the remedy for each of these causes.

The symptoms covered are: burner does not operate; pilot relay requires frequent resetting (pilot cycles on and off frequently); burner flame pilot lighter does not operate satisfactorily; furnace overheating; burner cycling too frequently; chattering electric valve; turnace produces insufficient heat; furnace does not maintain proper temperature; flame lifting from burner port and burner in operation; flash-back or burning at orifice; gas leaking from opening; yellow vent regulator flames; floating flames; resonant

noise; blower noise; and blowing noise in ducts and registers.

The book is prefaced with four safety rules that should always be followed carefully when servicing gas burners.

Copies of the book are available from the company at 50 cents each. In quantities of five or more, lower rates are available.

Folder Has Data on Bellows Air Devices

-KEY NO. M-611-

AKRON, Ohio—To inform industry of the tremendous cost savings and production increases secured with its equipment, the Bellows Co. here has published recently a 24-page booklet that outlines some of the jobs its controlled air power devices

The booklet also gives complete engineering data on the Bellows air motor and other air devices that work off of it.

Style of presentation is informal while a large number of pictures illustrate the various devices and their applications.

Aminco Revised Catalog On Refrigeration Line

____KEY NO. M-612___

DETROIT—A revised edition of its catalog covering refrigeration items has been announced by Aminco Refrigeration Products Co. here.

Detailed specifications are given on the firm's line of oil separators, water regulating valves, constant pressure valves, snap-action valves, high side floats, check valves, compressor suction throttling valves, flange adapters, and pressure-vacuum hand pumps.

Byers Reports Study on Snow Melting Systems

---KEY NO. M-613----

PITTSBURGH — A study of 50 snow melting systems, operating in 15 divisions of business and industry in 17 states, has just been published in a 36-page bulletin by A. M. Byers Co. here.

The bulletin, titled "Byers Wrought Iron for Snow Melting Systems," traces the growth of the systems from the first recorded installation in the United States in 1925 through hundreds of installations in the past six years.

The book contains 83 illustrations, mostly showing the systems either operating or being installed, plus eight piping layouts for a variety of installations including loading areas, ramps, sidewalks, driveways, and highways.

The text contains chapters devoted to: design, piping properties, use of anti-freeze, paving design and fill,

fabrication and installation, installing and operating costs, operating practices, controls, and auxiliary units.

Installations described are in the following fields: banks (3), office buildings (5), factory (8), automobile sales and service (7), highway (4), residential (4), commercial (7), department store (3), aviation (2), clubs (2), and apartment building, hospital, hotel, theater, and railroad (one each).

Air Conditioning Needs Told by Westinghouse

___KEY NO. M-614___

BOSTON — The equipment needed to do a job of air conditioning: cooling, heating, dehumidifying, cleaning, filtering, circulating; or ventilating; or air handling is covered in a 16-page condensed catalog available from Westinghouse Electric Corp. The equipment listed has been carefully selected from the full-line.

Covered in the catalog are: hermetically-sealed compressors, condensers, water coolers, heating coils, cooling coils, air-handling units, heating and ventilating units, surface dehumidifiers, air washers, filter washers, central-plant type completely self-contained air conditioning units, "within-the-space" type self-contained air conditioning units, unitheaters, industrial heaters, and various types of fans.

Ebco Announces Air Drier Merchandising Kit

----KEY NO. M-615-----

COLUMBUS, Ohio—A new eightpage merchandising kit has been announced by Ebco Mfg. Co. here, manufacturer of Oasis air driers.

The new two-color kit displays the many new sales tools being offered to appliance dealers and plumbers to reach homes that have damp-basement problems.

The kit pictures and lists available materials which can be used to follow-up on or tie-in with Oasis national advertising. Included are reprints of magazine advertisements, a floor display and demonstrator, counter card, window streamer, self-mailing folder, envelope stuffer, Oasis book matches, pre-stamped post cards, and newspaper mats in an assortment of styles and sizes.

Display Ideas Shown In New 'Cutawl' Booklet

----KEY NO. M-616---

CHICAGO—International Register Co. here, manufacturer of the Cutawi cutting machine, has announced a new 1951-52 edition of "Cutawi Helps."

The new booklet, Issue No. 36 contains eight pages of helpful idea for making more attractive, profitable displays through use of the Cutawl.

Included are 10 original ideas for special event displays; instruction telling how to make use of circle decorations; a page on Christman displays; and photos of prize-winning Cutawl-made displays.

Use of 4 Electrical Tapes Described by MMM

----KEY NO. M-617----

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ST. PAUL—More than 30 uses for four "Scotch" brand electrical takes for construction and maintenance work are described in a new eight-page brochure.

The brochure—describing tales Nos. 22, 24, 27, and 33—is available on request from Minnesota Mining & Mfg. Co. here.

It contains 33 photographs of applications such as the taping of lighting and communication systems, refrigeration equipment, relay cases, frequency changers, connectors, electric motors, bus bars, and others.

Properties are listed for each of the four electrical tapes.

Calcium Chloride Brine Maintenance Brief Out

-KEY NO. M-618---

WASHINGTON, D. C.—Publication of a brief on "Maintenance of Calcium Chloride Brine" has been announced by the Calcium Chloride Association here.

The brief (RB-1) presents information on testing brine strength, ammonia leakage, pH testing, corrosion inhibitors, and correcting for acidity and alkalinity. It includes a chart which gives quantities of calcium chloride recommended for strengthening an old brine or making a new brine.



NOISE is on the black list. Quietness commands a top position in surveys made to rate the most desirable features of motorized products. How does your equipment meet this present-day standard?

Many of America's leading products depend upon the quiet power of Emerson-Electric Motors to drive their operating mechanisms. These products also benefit from the quality construction and dependability of Emerson-Electric Motors, which are equally important factors in long-term customer satisfaction. The accumulated experience in designing and manufacturing Emerson-Electric Motors, dating from the pioneering days of 1890 to the present, is yours to command without obligation. Ratings 1/20 to 5 h.p. Your inquiry is invited.

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Emerson-Electric offers manufacturers of hermetically sealed units a broad background of engineering experience, covering all phases of hermetic motor design, specification and performance. In addition, unequaled, specialized facilities are available for the production of hermetic motor parts. Cooperative engineering service is available without charge. Write us today for Free bulletin No. 138.

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347UC	347	4164	5205	680	109.39
443UC	433	5196	6495	760	121.49
540UC	540	6480	8100	995	154.13
688UC	688	8256	10320	1260	204.19
867UC	867	10404	13005	1670	256.50
1080UC	1080	12960	16200	1975	307.92
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Servicing Hermetics In the Field

This is another in the new series of articles written to show the average serviceman how to service hermetic units in the field. Even those who have been working on hermetics for some time will find basic and practical information in these articles that will prove extremely helpful.

How To Dry System After Replacing Hermetic Unit

Some hermetic compressors and condensing units are equipped with fire fittings and gauge ports so they may be replaced in the field.

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When a compressor or condensing unit is replaced in the field, moisture usually gets into the system which of course, causes a great deal of trouble. To eliminate the moisture condition in a system, a drier must he installed or alcohol or liquid drying agent added.

Installation of a drier is generally considered the best method to remove moisture from any system, but since most hermetic units are capillary systems and are quite compact, it is usually rather difficult in field servicing to locate the drier where it will be effective.

QUANTITY IS IMPORTANT

Due to this lack of space and place to install a drier, most servicemen add methyl alcohol or a liquid drying agent such as Thawzone. However, they frequently add it without any regard for the quantity of refrigerant in the system. This practice will get the serviceman into more trouble.

An excessive amount of alcohol will cause corrosion and will also attack the insulation on the wire in the stator. It will also attack all aluminum parts it comes in contact

Methyl alcohol or a liquid drying agent can be safely used in a system if no more than 1% by weight of the refrigerant charge is added. In other words, if the system contains 100 oz. of refrigerant, not more than 1 oz. of methyl alcohol should be added.

Refrigerant charge of the average household refrigerator with a hermetic system is very small. It's as little as 8 oz. in some models, although others have as much as 21/2 lbs. (40 oz.). Obviously, the amount of alcohol that can be safely added is very small.

Servicemen in the field face an-

other problem that is not encountered in the shop which is rebuilding hermetics. Shop operations call for complete overhaul and dehydrating of the

SOME ALCOHOL MAY BE IN SYSTEM ALREADY

In the field, however, does the serviceman replacing a hermetic compressor or condensing unit know whether alcohol had been added to the system previously? Generally, the serviceman can't be sure, and the customer doesn't usually know himself. It would be unwise to add more alcohol to a system that already has

To make certain there is no alcohol in the system, the serviceman should attach a small, portable vacuum pump to the high side of the unit and draw a vacuum for about an hour while the unit itself is running. This will remove the alcohol and part of the moisture that may be present.

When putting alcohol into a system, it must be added from the high side, and never from the low side. If put in the low side, the alcohol may lodge in the stator of the compressor before it can mix with the refrigerant and whatever moisture is present. Alcohol in the stator can cause the insulation on the stator wiring to peel off. This in turn will cause a short.

Safest bet when replacing a compressor or condensing unit on a hermetic system is to install a good drier. Alcohol or a liquid drying agent can be used, however, but it should be used carefully cautiously.

If methyl alcohol or a liquid drying agent has to be put into the system, be sure to remove any conventional drier that may already be installed. If the drier is allowed to remain inthe system when alcohol is added, the drier will absorb the alcohol and release the moisture the drier has already absorbed.

Coolerator Distributors

DULUTH, Minn.-Coolerator distributors are now conducting more than 50 field service meetings for their service organizations and for dealer servicemen, according to John E. Unger, Coolerator national service manager.

Schools are directed by distributor service managers assisted by Coolerator field service engineers, R. H. Ganzer, E. L. Kneip, W. O. Dundas, and E. S. Orren, field service training supervisor.

Each meeting is divided into four section: General product information and general Coolerator service policies, refrigeration service training on refrigerators and home freezers, range service training, and open forum service discussions.

Mason Emanuels Serves Hubbell In Northwest

MUNDELEIN, Ill.—Hubbell Corp. here has announced the appointment of Mason Emanuels Co., 422 Smith Tower, Seattle, Wash., as its sales and service representative for Washington, Oregon, Idaho, British Columbia, and Alaska.

Representative stock of Hubbell products, including repair parts, will be available from Mason Emanuels' warehouse, it was stated. Hubbell designs and manufactures automatic back pressure regulators, capacity controls, and solenoid valves for refrigeration, air conditioning, and industrial applications.

B. R. McClure Appointed Conduct Service Schools Assistant to Sales Mgr. Of G-E Fractional Motors

FT. WAYNE, Ind.-B. R. McClure has been appointed assistant to the manager of sales of General Electric Co.'s Fractional Horsepower Motor Divisions here, according to R. C. Hanna, the divisions' manager of

Concurrently, D. C. Hanson has been made manager of the Refrigeration Equipment Sales Division and K. R. Whearley has been placed in charge of the Distribution, Parts, and Service Sales Section, Hanna announced.

McClure is a graduate of Purdue university. He is a veteran in the sales divisions, having held such positions as group head in charge of series motor sales; group head in charge of distribution, publicity and statistical group; and staff assistant to the divisions' manager.

Hanson has held various positions at the company's Ft. Wayne Works in the production and sales divisions. He was graduated from Kansas State college in 1935 with a B.S. degree in electrical engineering, and joined G-E that same year. Except for five years of Army service during World War II, he has had continuous service since that date.

Whearley was graduated from Purdue university in 1928 with a B. S. degree in mechanical engineer-

Since joining G-E in 1930, he has had wide experience as a proposition engineer in the Fractional Horsepower Motor Sales Divisions.



Midwest Distributors Named for Revco, Remington CHICAGO - Appointment of new State Distributing Co., Omaha; and Onthank-Davidson Co., Davenport.

distributors for Revco home freezers and Remington air conditioners has been announced by J. H. Rasmussen & Co. here, midwest sales represen-

Herman Hollander Co., St. Louis; G. W. Onthank Co., Des Moines; Bi-

The VEN corp.

Newly-appointed Remington distributors are Graybar Electric Co. in Chicago, Hammond, Ind., Grand Rapids, Indianapolis, Des Moines, Davenport, St. Louis, and Little Rock; and Wright & Wilhelmy, Inc.,



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Fogel Completes Field Representation 4 New District Sales Managers

PHILADELPHIA - With the appointment of four new district sales managers, the field representation for Fogel Refrigerator Co., manufacturer of store fixture equipment is now complete, according to E. A. "Terry" Terhune, vice president in charge of sales.

George T. Estfan, with headquarters in Wichita, will direct Fogel sales in western Missouri, part of Iowa, and the states of Nebraska, Kansas, Oklahoma, and Arkansas.

He has had several years of experience as a distributor of refrigerated store fixture equipment and is widely known in the midwestern

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W. H. (Bill) Hall, head of the new distributing company, has for the past several years been closely identified with the ice cream and frozen food businesses in Michigan.

Jimmie Hill To Represent **Automatic Firing In Dallas**

DALLAS-Jimmie Hill Air Conditioning Co. has been appointed Dallas distributor for Automatic Firing Corp., manufacturer of the Fridg-A-Fire heating and cooling unit and "Cool-A-Matic" packaged air condi-

The appointment came about during a visit to the Automatic Firing Corp. plant in St. Louis by Hill.

New headquarters are at 410 South Industrial in Dallas.

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"To dry a really wet system by this method, first remove the watercooled condenser or the bursted low side, whichever is the cause for the water in the system," explains Ehlers. "It will also be necessary to remove all boiler-type low sides or any part similarly designed, such as oil separators, since they trap and can hold a large volume of water.

"Disconnect all TX valves and reconnect the liquid to the coil inlet. The TX valve restricts too much of the airflow when left in the system.

"Disconnect the suction line from the compressor and run the compressor, allowing room air to enter the suction port. This will force out a large amount of water. If it is a multiple system, allow the compressor to pump through each fixture alone for about 5 minutes. Then allow it to pump through all fixtures at once for about 10 minutes.

"This helps to eliminate the possibility of too much water collecting and forming a trap in some fixtures.

"Reconnect the suction line to the compressor and remove the discharge line. Connect the discharge line to the gauge port on the suction service valve on the compressor and crack the service valve to allow compressor to draw from both high and low sides. Disconnect the liquid line from the coil inlet on each fixture and the compressor will then draw room air into both the liquid line and coil inlet opening.

"Be sure air is entering each opening. This can be checked very satisfactorily by using smoke. Allow unit to run in this manner for about 24

"Boiler-type low sides should be drained of water and then rinsed out with alcohol. They then should be placed back in the fixture they were removed from and the suction lines reconnected and allow room air to pass through them along with the rest of the system. This helps to evaporate the alcohol, which can be harmful to some systems.

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in alcohol then blown out with refrigerant.

"Oil separators should be taken apart since the oil return line usually traps water. Blow out oil line and heat with torch. The shell can be wiped dry with a cloth.

This can be successfully achieved with a relative humidity of the air as high as 80% and possibly higher It is very important, and a must that every part of the system when the air is passing through refrigeran lines be equal or above the tempera ture of the air being drawn into th system.

"Air passing over water acts lil a sponge and picks up water, suc as drying up the basement floor aft hosing with water, or drying cloth on the line, and the greater the breeze the quicker it will dry.

"After sufficient length of tin has passed, reconnect entire system. Drain oil from compressor and rin with alcohol and fill with new o pump a vacuum on entire system remove moisture containing air. Add vapor refrigerant to 0 p.s.i. gauge pressure. Install new drier. Pump vacuum again and recharge system for operation.

"There may be other little technicalities which might arise on some particular jobs, but they would be rare," Ehlers concludes.

Simple Tool Helps In Replacing Condenser Fan

The tee nut of a shipping brace will make a very useful tool for snapping the spring clip into place when changing a fan blade on a Westinghouse refrigerator.

Screw a 5/16-18 bolt part way into the tee nut and then jam the bolt so it won't turn in the nut. Turn up two diagonally opposite corners of the tee nut so they'll hold the spring clip as it's pushed into the groove. Enlarge the hole in the end of the tee nut so it will fit over the fan

Put the fan blade on the shaft first, and then center the spring clip over the end of the shaft. Gripping the spring clip with the tee nut end of the tool permits the serviceman to push the clip until it snaps into the groove.

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Dryseal gives dirt and moisture the bounce at the factory. A special, precise, mechanical doublecrimp seal is made at each end of the tube when it is manufactured. This means Dryseal is delivered to you bone-dry and free from dirt. The seal is made in such a way that the diameter of the tube does not change, which permits Dryseal to be passed through any opening large enough for the tube itself.

While Dryseal may be stubborn about keeping out

bending. The soft temper of the copper used in Dryseal allows you to make the most intricate bends by hand. And its ductility and soft temper make it extremely easy to flare for compression fittings without danger of splitting. Economical tube sizes range from 1/4" to 3/4" O.D.

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And, for your greater convenience we have just recently brought out Dryseal in a nifty-50 onecoil carton. This carton, which has been attractively designed for easy identification in stock, contains one 50-foot coil of Dryseal . . . is easier to handle, light weight, economical.

dirt and moisture it's a soft touch when it comes to





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MITCHELL Room Air Conditioners The Profit "Shot-in-the-Arm" for your Summer Appliance Business!

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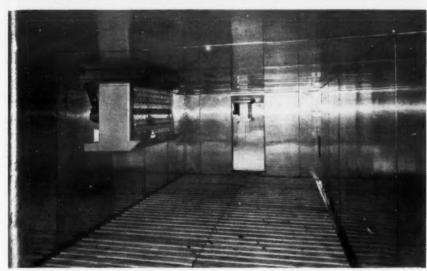
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METAL SHEATHED hardening room of Ballard Ice Cream Co., distributor of Eskimo Pies, is so d to be one of the largest sectional installations of its kind. Three Bush unit coolers hold temperature of -15° F.



VAULT IS DIVIDED into two equal compartments each of which is operated by 71/2-hp. condensing unit. Reco-Fab sectional freezer measures 60 ft. long, 12 ft. wide, and 8 ft. high.

60-Ft. Sectional Ice Cream Hardening Room Built for Specialty Distributor

INDIANAPOLIS—One of the largest sectional ice cream hardening rooms in this country was recently installed at the Ballard Ice Cream Co. plant here by Refrigeration Engineering Corp. of Philadelphia, the latter firm has announced.

The room is a Reco-Fab Frosti-Vault sectional walk-in cooler measuring 12 ft. wide by 60 ft. long and

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8 ft. high. It is used for holding Eskimo Pies, which Ballard distributes in 50 Indiana counties.

Sheathed on both sides with metalply, the wault is equipped with three DF180 Bush unit coolers with automatic electric defrost. It is divided into two equal compartments, each of which is operated by a 7½-hp. "Freon" condensing unit. The vault is maintained at a temperature of approximately -15° F.

Principal advantage of the sectional freezer over the built-in type to Ballard is that within three days after the cooler arrived in Indianapolis it was erected and ready for operation.

2 Skyscraper Apartments To Be Air Conditioned With York Window Units

PHILADELPHIA—Two skyscraper apartments now nearing completion in Rittenhouse Square here will be completely air conditioned with the newest type system developed by York Corp.

The buildings are the 25-story Rittenhouse Claridge and its 20-story companion, Rittenhouse Savoy.

The system, known as "Fan Window Units," is said to employ 20% less critical material. It was specifically designed for completely air conditioning multi-story, multi-room buildings.

Fan Window Units make it possible for each tenant to change the temperature of any room at will and vary the quantity of filtered outdoor

During seasons when neither heating nor cooling is required, 100% outside air may be brought in through the system.

Refrigeration Units WANTED

Desire to purchase 1/6 to 1-IIP Sealed or Open type; and and ard brands; Complete condensing units; Also motors, ontrols, valves, etc. Give full details.

HARWOODE EXPORT CO.
31 E. 4 Street, New York 3, N. Y.

Tulsa Studies Licensing For Refrigeration Men

TULSA, Okla.—City officials are considering an ordinance regulating design, alterations, repair, and maintenance of refrigeration equipment and establishing examination and license fees, according to Randall G. West, assistant city attorney.

The ordinance would set up three classes of licenses. These are:

Class A—for any person engaging in the business of contractor or journeyman and installing, altering, or repairing any and all refrigeration equipment or apparatus. The class A license is \$100.

Class B—to permit anyone to install, repair, or alter refrigerating equipment rated at 75 tons or more in capacity.

Class C—for any person working as journeyman at installing, altering, or repairing refrigeration equipment. The fee is \$10.

Licenses would be issued after examination before an examining board found the applicant qualified for the work. The examination fees would be \$20 for contractors, \$10 for journeymen.

A contractor holding a class A license would have to post a surety bond with the city for \$2,000. The bond for a class B contractor license would be \$1,000.

The ordinance specifies that no person shall install, repair, or alter refrigeration equipment of a capacity of three tons or over unless properly licensed by the city.

Inspection fees also are provided for in the measure. These are \$4 for equipment of three tons or over, \$8 for 26 tons or over.

Bloomenstein Directs Sales, Research at Frigid Igloo

YONKERS, N. Y. — Nelson S. Bloomenstein has been appointed director of sales and research at Frigid

Igloo Mfg. Corp.
here, it was announced recently
He had been
sales manager and
vice president at
Ace Cabinet Corp.
Prior to that he
was associated
with Servel, Inc.
(electric division)

N. Bloomenstein facturers in the low temperature field, and recently with Coldin Cabinet Corp. as sales engineer.

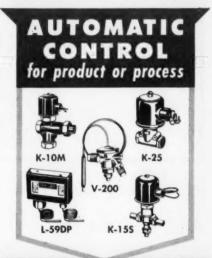
contacting manu-

During World War II, Bloomenstein designed and manufactured portable rivit freezing cabinets and a self-contained sub-zero (-75° F.) cabinet for the testing of radar and radio parts.

Ten Eyck To Change Cooling To Comply with Albany Laws

ALBANY, N. Y.—The Ten Eyck hotel is taking steps to change over its air conditioning system to comply with Albany's new water conservation ordinance.

The hotel obtained from the Building Department a permit to install two 60-ton cooling towers costing \$15,000. E. W. Tompkins Co., Inc. is the contractor. The hotel will be permitted to use its present system until the new one is installed.



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The tee nut of a shipping brace will make a very useful tool for snapping the spring clip into place when changing a fan blade on a Westinghouse refrigerator.

Screw a 5/16-18 bolt part way into the tee nut and then jam the bolt so it won't turn in the nut. Turn up two diagonally epposite corners of the tee nut so they'll hold the spring clip as it's pushed into the groove. Enlarge the hole in the end of the tee nut so it will fit over the fan

Put the fan blade on the shaft first, and then center the spring clip over the end of the shaft. Gripping the spring clip with the tee nut end of the tool permits the serviceman to push the clip until it snaps into the groove.

USE THE COUPON!

For "easy-to-get" product information . . . use coupon in the "Information Center" form.

These Pests haven't a chance of getting into..

REVERE



refrigeration tube

Dryseal gives dirt and moisture the bounce at the factory. A special, precise, mechanical doublecrimp seal is made at each end of the tube when it is manufactured. This means Dryseal is delivered to you bone-dry and free from dirt. The seal is made in such a way that the diameter of the tube does not change, which permits Dryseal to be passed through any opening large enough for the tube itself.

While Dryseal may be stubborn about keeping out

dirt and moisture it's a soft touch when it comes to bending. The soft temper of the copper used in Dryseal allows you to make the most intricate bends by hand. And its ductility and soft temper make it extremely easy to flare for compression fittings without danger of splitting. Economical tube sizes range from 1/8" to 3/4" O.D.

And, for your greater convenience we have just recently brought out Dryseal in a nifty-50 onecoil carton. This carton, which has been attractively designed for easy identification in stock, contains one 50-foot coil of Dryseal . . . is easier to handle, light weight, economical.





sltimore, Md.; Chicago and Clinton, Ill.; Detroit, Mich.; Los Angeles and Riverside, Calif.; New Bedford, Mass.; Rome, N. Y.— Sales Offices in Principal Cities, Distributors Everywhere. SEE "MEET THE PRESS" ON NBC TELEVISION EVERY SUNDAY

MITCHELL Room Air Conditioners The Profit "Shot-in-the-Arm" for your Summer Appliance Business!

HERE'S WHY BIG SELLING **FEATURES** Dyna-Cooler Turbo-Dryer · Air Scoop

Longest Margins for Biggest Earnings

Acclaimed Everywhere the World's Finest

Ride the MITCHELL selling wave in 1951, with these exclusive advantages. Get set right now for profitswrite today for complete details on the money-making MITCHELL dealership.

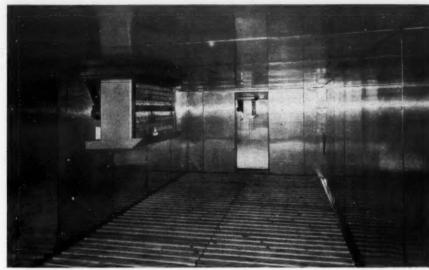
MITCHELL MFG. COMPANY Chicago 14, Illinois lakers of the World's Finest

Room Air Conditioners

MITCHELL is better than ever in '51!

get your share of this big volume business

WRITE FOR THE PROFIT FACTS NOW MITCHELL MFG. COMPANY 2529 N. Clybourn Ave., Chicogo 14, III. Send me all the facts and quote me dealer prices at once on MITCHELL Room Air Conditioners



METAL SHEATHED hardening room of Ballard Ice Cream Co., distributor of Eskimo Pies, is said to be one of the largest sectional installations of its kind. Three Bush unit coolers hold temperature of -15° F.



VAULT IS DIVIDED into two equal compartments each of which is operated by 71/2-hp. condensing unit. Reco-Fab sectional freezer measures 60 ft. long, 12 ft. wide, and 8 ft. high.

60-Ft. Sectional Ice Cream Hardening Room Built for Specialty Distributor

INDIANAPOLIS-One of the largest sectional ice cream hardening rooms in this country was recently installed at the Ballard Ice Cream Co. plant here by Refrigeration Engineering Corp. of Philadelphia, the latter firm has announced.

The room is a Reco-Fab Frosti-Vault sectional walk-in cooler measuring 12 ft. wide by 60 ft. long and

DRIFREEZ

Reg. U. S. Pat. Off.

Outperforms All

Dehydrators by

Test

Never Stores Water

Removes to 11/2

oz. Physically Neutralizes All

Acidity

Prevents Corro-

sion and Plating

Perfectly Filtered

SERVICE CALLS

BERNA CORP.

RICHMOND HILL 18, N. Y.

tributes in 50 Indiana counties.

Principal advantage of the sectional freezer over the built-in type to Ballard is that within three days after the cooler arrived in Indianapolis it was erected and ready for

2 Skyscraper Apartments To Be Air Conditioned With York Window Units

PHILADELPHIA—Two skyscraper

The buildings are the 25-story Rittenhouse Claridge and its 20-story

The system, known as "Fan Window Units," is said to employ 20% less critical material. It was specifically designed for completely air conditioning multi-story, multi-room buildings.

Fan Window Units make it possible for each tenant to change the temperature of any room at will and vary the quantity of filtered outdoor

During seasons when neither heating nor cooling is required, 100% outside air may be brought in

8 ft. high. It is used for holding Eskimo Pies, which Ballard dis-

Sheathed on both sides with metalply, the vault is equipped with three DF180 Bush unit coolers with automatic electric defrost. It is divided into two equal compartments. each of which is operated by a 71/2-"Freon" condensing unit. The vault is maintained at a temperature of approximately -15° F.

operation.

apartments now nearing completion in Rittenhouse Square here will be completely air conditioned with the newest type system developed by York Corp.

Units Never Require Baking companion, Rittenhouse Savoy. By Vacuum SAVES ENDLESS

Tested for Safety by Engineering Laboratory SEND FOR BROCHURE

through the system.

Refrigeration Units WANTED

Desire to purchase 1/8 to 1-11P Sealed or Open type; standard brands; Complete condensing units; Also motors, controls, valves, etc. Give full details.

> HARWOODE EXPORT CO. 31 E. 4 Street, New York 3, N. Y.

Tulsa Studies Licensing For Refrigeration Men

TULSA, Okla.-City officials are considering an ordinance regulating design, alterations, repair, and maintenance of refrigeration equipment and establishing examination and license fees, according to Randall G. West, assistant city attorney.

The ordinance would set up three classes of licenses. These are:

Class A-for any person engaging in the business of contractor or journeyman and installing, altering, or repairing any and all refrigeration equipment or apparatus. The class A license is \$100.

Class B-to permit anyone to install, repair, or alter refrigerating equipment rated at 75 tons or more in capacity.

Class C-for any person working as journeyman at installing, altering, or repairing refrigeration equipment. The fee is \$10.

Licenses would be issued after examination before an examining board found the applicant qualified for the work. The examination fees would be \$20 for contractors, \$10 for journeymen.

A contractor holding a class A license would have to post a surety bond with the city for \$2,000. The bond for a class B contractor license would be \$1,000.

The ordinance specifies that no person shall install, repair, or alter refrigeration equipment of a capacity of three tons or over unless properly licensed by the city.

Inspection fees also are provided for in the measure. These are \$4 for equipment of three tons or over, \$8 for 26 tons or over.

Bloomenstein Directs Sales, Research at Frigid Igloo

YONKERS, N. Y. - Nelson S. Bloomenstein has been appointed director of sales and research at Frigid Igloo Mfg. Corp.

here, it was announced recently

He had been sales manager and vice president at Ace Cabinet Corp. Prior to that he associated with Servel, Inc. (electric division) contacting manufacturers in the

N. Bloomenstein low temperature field, and recently with Coldin Cabinet Corp. as sales engineer.

During World War II, Bloomenstein designed and manufactured portable rivit freezing cabinets and a selfcontained sub-zero (-75° F.) cabinet for the testing of radar and radio

Ten Eyck To Change Cooling To Comply with Albany Laws

ALBANY, N. Y .- The Ten Eyck hotel is taking steps to change over its air conditioning system to comply with Albany's new water conservation ordinance.

The hotel obtained from the Building Department a permit to install two 60-ton cooling towers costing \$15,000. E. W. Tompkins Co., Inc. is the contractor. The hotel will be permitted to use its present system until the new one is installed.



GENERAL CONTROLS

Manufacturers of Automatic Pressure, Temp

Level and Flow Controls
FACTORY BRANCHES: Boltimore 5, Birm ton 16, Buffalo 3, Chicago 5, Cincinnoti 2, Cleveland 15, Dallas 2, Denver 4, Detroit 21, Glendale 1, Houston 6, Indianapolis 4, Kansas City 2, Minneapolis 2, Newark 6, New York 17, Philadelphia 23, Pittsburgh 22, St. Louis 3, San Francisco 7, Seattle 1, Tulsa 6, Washingt DISTRIBUTORS IN PRINCIPAL CITIES







The unquestioned standard of the industry for complete automatic defrosting at temperatures below 32°

WRITE FOR BULLETIN R-124

KRAMER TRENTON CO. • Trenton 5, N.J.

Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Insulation: Selection And Installation (4)

onor

Ideally, an insulation in itself should have no odor nor should it absorb odors. Insulations are used in rooms or refrigerators in which foods or other commodities are stored, whose value would be either destroyed or greatly reduced by foreign odors. The odor does not necessarily have to be a "bad" or unpleasant odor to be objectionable; even the scent of an expensive perfume would scarcely improve a pound of butter. So an insulation should be odorless.

In some types of refrigerator construction, only the outer or warm side of the insulation is sealed, so any insulation odor would be able to reach the inside of the refrigerator. In other types of construction the insulation is completely sealed, inside and out. In this latter construction, the odor of the insulation would be of less importance.

An insulation may be comparatively odorless when dry, but may throw off an objectionable odor when wet or even damp. No insulation should be permitted to become wet; its insulating value is greatly reduced, almost to the point at which the insulation is almost valueless in keeping out heat. If when wet, it has a distinct and unpleasant odor, such an insulation would be even less suitable or acceptable.

Some insulations that in themselves are practically odorless, are capable of absorbing odors and passing them on to the refrigerated spaces. Such insulations are unsuitable, especially for use in refrigerators in which foods are stored. Dairy foods are particularly susceptible to contamination by foreign odors.

STRENGTH OF THE INSULATION

In the ordinary modern refrigerator, the strength of the insulation is not as important as in cold storage rooms or even larger walk-in coolers, but it is nevertheless a factor that must be seriously considered.

The cabinet itself may provide sufficient structural strength in itself without support from the insulation, but can the insulation support itself? Has it enough rigidity to prevent sagging and settling due to its own weight and aggravated by vibration

of the machine? Settling of loose or otherwise weak insulation could easily leave an uninsulated air space of several inches at the top of the walls, which being uninsulated, would sweat.

Loose insulations may have to be "jolted down" to insure that they have settled as much as they will.

Moreover, as in some freezer chests or ice cream cabinets, does the liner rest on the bottom insulation? If so, the insulation must be strong enough to bear the weight not only of the liner, but also the food or other contents.

Is the insulation brittle and will it break or crumble with the ordinary shocks in handling the refrigerator in manufacture or in transit to the dealer and to the buyer? Glass foam, for example, while a very good insulation for large structures, is brittle and therefore unsuitable for most cabinet work. It is even subject to excessive crumbling and breakage in some large structures near railway tracks from which it receives vibration shocks.

Walls of cold-storage rooms are frequently built up of block insulations, cork, glass foam, rubber foam, etc., in courses much the same as brick or concrete blocks; the inner and outer walls are coated with a waterproof sealer and then given a coat of cement. There are no studdings or other supporting structures in the wall, except at doors. Obviously, the block insulation must have sufficient structural strength to be suitable for such application.

Rigid board or block insulations of cork, glass foam, cane or other fibers, or mineral wool, formed with a binder, are very popular for walls of large insulated structures. The loose insulations are widely used also, despite the necessity of building the structure strong enough to support and contain the insulation, and despite the necessity for care in packing the insulation so that it will settle no further.

The insulation for the floors of large structures must be strong for they may have to support a slab of concrete laid on them as the wearing floor, and also the weight of the products stored. For this type of construction, rigid board insulation, particularly sheet cork is highly favored.

In the ceilings of the larger rooms, the insulation may be nailed, pegged, or wired to the ceiling and must be rigid and strong enough to support its own weight. A rigid, light, board insulation is suitable.

INSTALLATION LABOR

As labor rates increase, the amount of labor required to install the insulation becomes an increasingly important factor for consideration. It may, in fact, become of greater importance than some of the insulation characteristics or the cost of the insulation itself.

In field service operation—re-insulating cabinets—it is comparatively less important than conductivity and other factors; but on the factory assembly line or for insulating large structures, the amount of labor in installing the insulation is exceedingly important.

The amount of labor varies not only with the kind and type of insulation, but it varies also with the cabinet or structure to be insulated and where the work is to be done. An insulation that would require the minimum of labor to install in a household refrigerator in the factory where facilities exist for blowing loose insulation into the cabinet walls, would be very expensive to install on the walls of an existing brick building being converted to cold storage.

One new type foam insulation is made right in the factory and forced into the cabinet wall while still semifluid. It cools and hardens in the cabinet wall, filling all of the spaces and sealing itself. One of the difficulties of such a process is that when the foam cools or dries, it tends to shrink and pull away from the cabinet and thus leave air spaces.

Blowing loose insulations into cabinet walls or into the walls and ceilings of existing houses is a common process. These instances are mentioned as indicating the high degree of interest in lowering the labor cost of installing insulation.

COST OF THE INSULATION

The cost of the insulation itself is, of course, highly important in the selection of and insulation, but it must be carefully considered and evaluated. If the insulation is sold by the pound, the density of the insulation enters into the evaluation.

Even though an insulation of high density (a "heavy" insulation) is low in cost per pound, it may prove to be more expensive per cubic foot and therefore for a given refrigerator, than a lighter insulation that costs more per pound.

For mobile vehicles, an insulation of high density, on a truck body for example, although low in first cost based even on a cubic foot of the insulation, may virtually prove to be quite expensive in the added wear and tear on tires, added gasoline to transport the additional weight and in the additional cost due to the necessity of a stronger frame and other construction.

The original cost of the insulation must be weighed against its conductivity. An insulation that has a low conductivity (a low "k factor") will be lower in first cost than another insulation of higher conductivity even though the two insulations cost the same per cubic foot.

More of the insulation with the higher "k factor" will be required, so that even if it has a lower first cost per cubic foot, it may prove to cost more for a given refrigerator because more of it will be required in order to keep out the same amount of heat as the insulation with lower conductivity.

The insulation with a higher conductivity will certainly require a thicker wall and a heavier frame and other construction, than an insulation of low conductivity if the two are to retard heat flow equally. This may increase the cost of construction of the refrigerator enough to result in a higher over-all cost.

Moreover, the thicker wall reduces the interior volume of the refrigerator for any given outside dimensions, thus increasing the refrigerator cost per cubic foot of usable space. In addition, the reduced inner volume (or greater outside volume, if the inner volume is to be comparable) may have sales disadvantages, and these may be most serious factors in affecting sales volume and over-all costs.

The insulation may have to be so well sealed, that the added cost of doing so, may be more than offset by a lower initial cost of the insulation. In fact, almost any characteristic of an insulation must be weighed against cost.

Desirable characteristics must always be balanced against the cost.

Undesirable characteristics may be accepted if the added cost of providing means to offset the undesirable characteristics does not result in excessive over-all cost.

The over-all cost is composed of a number of factors, all of which must be considered and evaluated separately.

RCA Television Course Offered Narda Members

CHICAGO—By special arrangement with the RCA Institutes, Inc., the National Appliance and Radio Dealers Association will offer the new Home Study Television Servicing Course to its members and to the service organizations whose services they employ, it was announced recently by Mort Farr, NARDA president.

The program, approved by the NARDA executive board, will help retailers in television regions upgrade the calibre of their replacements and help those in forthcoming television areas convert their present radio service staffs to qualified television servicemen, the association stated.

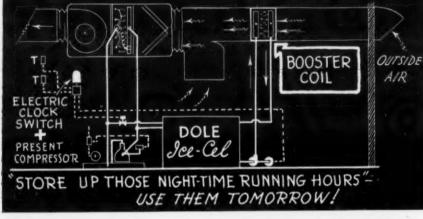
The RCA Home Study Course covers installation, servicing technique, and the basic theory of television receivers. It consists of 10 units, with each unit having its own bound textbook.

Beaullieu To Distribute Chrysler Airtemp Lines

LAFAYETTE, La.—Beaullieu Air Conditioning and Heating Co., announced recently its appointment as distributor for Chrysler Airtemp air conditioning, heating, and commercial refrigeration.

The firm is headed by Frank Beaullieu, president; Frank Beaullieu III, engineer and general manager; Ted Beaullieu, treasurer; and Arthur Randol Jr., business manager.

40% MORE CAPACITY with DOLE Ice-Cels



DOC DOLECO Says-



DOLE loe-Cels can be used singly or in batteries to provide any desired cooling capacity.



Many air conditioning systems—especially in older buildings—are seriously overloaded and additional capacity is unobtainable without replacement of the present compressor by a larger machine and major changes in the installation. You can avoid costly remodeling by using DOLE Ice-Cels with present equipment and get up to 40% more capacity.

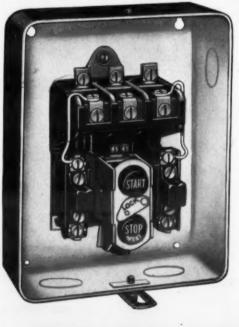
The diagram above shows how a DOLE Ice-Cel can be installed and hooked into the system as a booster. An electric clock switch is arranged to operate the compressor far into the night to charge the Ice-Cel. Then, during peak hours the following day, this stored up cooling power is available to augment the regular capacity of the compressor.

DOLE manufacturing facilities including modern machinery and experienced personnel for sheet metal working are available for handling Government orders. We invite your inquiries.



DOLE REFRIGERATING COMPANY 5918 N. PULASKI RD., CHICAGO 30, ILL.

103 Park Ave., New York 17 44 Elgin St., Brantford, Ont.



MANUAL STARTERS with PUSH BUTTONS that provide dependable overload protection

These compact, hand operated starters have two convenient push buttons . . . START and STOP . . . that operate the switch mechanism. Press the START button and the silver alloy contacts close with a quick snap. Press the STOP button and the contacts open with the same positive action. Two overload breakers automatically open the switch in case of sustained overload. Just what you need for single phase or three phase air conditioning and refrigeration motors. Send for Bulletin 609.

Allen-Bradley Co., 1313 South First Street, Milwaukee 4, Wisconsin

ALLEN-BRADLEY MOTOR CONTROLS for Air Conditioning and Refrigeration • Manual and automatic across-the-line starters • Compression type velvet smooth starters • Pressure and temperature switches and controls • Relays and contactors from 1 to 12 poles

Push buttons and selector switches.



Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid set is made.

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. Ordnance District Offices do not have information on any other purchases.

Description	Quantity I	nvitation No.	Opening Date
Commandant of the Marine C ATTN: Supply Dept., Procur	orps, Washing ement Section	ton, D. (
Air-conditioning unit electric- motor driven, type IV, General Services Adminis- tration spec no. 2024	3	1843	8 Jun 51
Cooling tower, mechanical draft, outdoor type, 10 ton capacity	3	1843	8 Jun 51
Refrigerators, electric, portable, class 2, size 1B, Federal Spec. AA-R- 211A, with exceptions	25	1931	14 June 51
Supply Officer, Naval Proving Conditioner-air-room	Ground, Dah		rginia 11 Jun 51
Chicago Quartermaster Depot, Ill.	QM Purchasin	g Divisio	n, Chicago,
Cabinet, frozen food display, 20 cu. ft.			
Domestic Pack Overseas Pack	20 20	1652 1652	11 June 51 11 June 51
Cabinet, ice cream storage, electric, 25-gal, capacity, 33½ x EQX 52 inches			
Domestic Pack Overseas Pack	50 50	1652 1652	11 June 51 11 June 51
Chest, ice storage, NR & 400 lbs. capacity			
Domestic Pack	100	1652	11 June 51

Commanding Officer, Naval	Supply	Depot, Mechani	iesburg, Pa.
ATTN.: Code 778B. Fan, exhaust, Buffalo Blower Co., Single width,	1	51-49873	11 June 51
class 1, arrangement nr. 3, size 10, type LL, 20 640 CFM, 288 RPM Exhaust fan, 24 in. 1lg Mfg. Co. NR 48 112 or equal	8	51-49874	11 June 51
Supply Officer, Philadelphia Hydrometer float in accord w/specs.	Naval SI 24	ships-3066	lphia 12, Pa. 6 June 51
Officer In Charge, Navy Pu Water coolers, electric	rchasing 430	Office, Washin 5352	gton, D. C. 14 June 51

Type I, size 10 and size 5			
GENERAL SERVICE	CES ADMI	NISTRAT	ION
Description	Quantity	Reference No.	App. Bid Date
General Services Administrat 528, U. S. Courthouse, 219 S.	ion, Federal Clark St.,	Supply Se Chicago 4,	rvice, Room Illinois
Water coolers, electric Refrigerators, gas operated Refrigerators, electrically operated, various kinds	37 6 54	CHD-2006 CHD-1014 CHD-1014	6-4-51 6-11-51 6-11-51
Regional Information Officer Administration, Washington	Region 3, 25, D. C.	General Se	rvices

Repair parts for air conditioning system, misc. Air conditioning units, package, GSA spec. 2024, capacit 35,000 B.t.u./hr., 56,000 B.t.u./hr., and	pcs 52 unit	1196 1217	6-8-51 6-15-51
87,000 B.t.u./hr. Cooling towers, 5 & 7½ ton Chief, Procurement Branch, O'Hare Field, Chicago Inter			
Filter, dustop, 12" x	60	31-504	6-7-51
Filter pad, 10" x 10", Special TUM, American air filter Co. type G	60	31-504	6-7-51
Filter, air, panel type, 24" x 20" x 1"	60	31-504	6-7-51

Regional Information Officer, Region 3, General Services Administration, Washington 25, D. C.
Parts for Carrier refrig- approx. erator, compressors, misc. 489 1179

Description	Quantity	Reference No.	App. Bid Date
Chief, Procurement Section, Ave. and Van Ness St., N.	National Bur	eau of Stands	rds, Conn.
Fitting, Mueller W2003,	60	B-2-3079-51	6-5-51
or Equal Fitting, Mueller W1317, or	48	B-2-3079-51	6-5-51
Fitting, Mueller W2009, or	24	B-2-3079-51	6-5-51
Equal Chief, Supplies and Services Evaluation Center, Civil Ac 5767. Indianapolis 21, Ind.	Branch, Tec	hnical Develo ministration,	pment and P. O. Box
Copper tubing (various sizes)	6,000 ft.	139	6-8-51

U. S. DEPARTMENT OF COMMERCE

Macy's, Gimbels Cut Some Appliances--

(Concluded from Page 1, Column 5) dropped the price to \$79.43, its arch rival again announced it would follow suit. At one point, the cleaner could be had in New York for \$75.14.

In the case of the Mixmaster, Macy's knocked the price down to \$43.50 from \$46.50. In a full-page advertisement published the next day, Abraham & Straus listed the Mixmaster at \$29.95.

The A&S advertisement also announced these price cuts, among several others: Dormeyer electric mixer #5000, from \$38.50 to \$34.95; Proctor electric iron, from \$11.45 to \$9.95; General Mills automatic pop-up toaster from \$22.95 to \$18.95. According to the advertisement, the store was offering "immediate savings of up to 10% and even more."

Macy's came right back and undersold A&S by 6%. Once again, Gimbels matched Macy's prices. Right in the middle of the battle were such other major participants as Goldsmith Bros., Hearn's, Bloomingdale's, and Namm's.

Some stores joined the war reluctantly, according to one source. But practically all were assuring customers that they would keep their prices competitive. As the battle waged hotter, price cuts were being made almost every half hour.

Housewives wasted no time taking advantage of the battle, flocking to the stores in large numbers. One was quoted as saying:

"The newspapers are full of articles on Supreme Court decisions on this 'fair trade' thing and store clerks tell me that Macy's is fighting some kind of a battle for free enterprise. All I know is I am able to buy a good many household necessities at cut prices, and I love it."

Macy's first advertisement did not list television or radio sets. But Richard Weil, Jr., president of Macy's, declared: "We will meet all competition."

Neither did the advertisement list General Electric small appliances. This was because Macy's has been enjoined from cutting the prices of these items. The store is fighting the injunction case, now before the Appellate Division.

Where it would all end nobody knew. "We've seen these (wars) before," commented one store official. "I don't think it'll last more than a few days. There's no real reason or need for a prolonged fight."

Said another: "I'd like to see it last for a while. It should stimulate business generally and we need that. Sales have been too slow for quite a while now."

Manufacturers in general were said to be resentful of Macy's for starting the war. But some apparently were holding off any attempts to control the situation until they see how bad it becomes. Meanwhile, possible courses of action were being studied.

Proponents of fair trade saw a bright side in that if the battle spread to a wide area of the country, it would enhance chances that Congress would correct the deficiency in the Miller-Tydings Act which resulted in the high court decision.

However, late reports indicated that the price war was strictly a local brawl. The official of a Boston store observed: "We'll meet competition, but don't intend to blaze any trails."

Conley Manages Branches For Crosley Distributing

CINCINNATI—W. C. Conley, Jr., has been appointed vice president and manager of branches of the Crosley Distributing Corp.,

To the second

W. C. Conley, Jr. tor Corp. is a it has been announced by W. A.
Blees, general
sales manager of
the Crosley Div.,
Avco Mfg. Co.
Conley was formerly vice presi-

6-4-51

merly vice president in charge of sales for Coolerator Co., and before that had been with Hotpoint, Inc.

W. C. Conley, Jr. Crosley Distributor Corp. is a wholly-owned subsidiary of Avco Mfg. Corp.

NARDA Meeting --

(Concluded from Page 1, Column 3)
Today"; W. A. Blees, vice president in charge of sales, Crosley Division—
"Good Management Is Good Business"; Anthony Wright, vice president in charge of engineering, Capehart-Farnsworth Corp.—"Servicing Problems of Tomorrow."

In addition to the guest speakers, there will be panels of practical discussion conducted by NARDA dealers.

Registration for the meeting, including reception, breakfast, luncheon, and all-day business sessions, will be \$15 for individuals, \$12.50 apiece for five or more members of local associations registering as groups.



From left to right are George R. Lindahl, Jr.; Albert Rebel; and Glendon W. Stephens key figures in the formation of the western office of the Warren Co.

New Warren Office --

(Concluded from Page 1, Column 2) general sales manager of Super-Cold has joined the newly-opened Warren western divisional offices as regional manager.

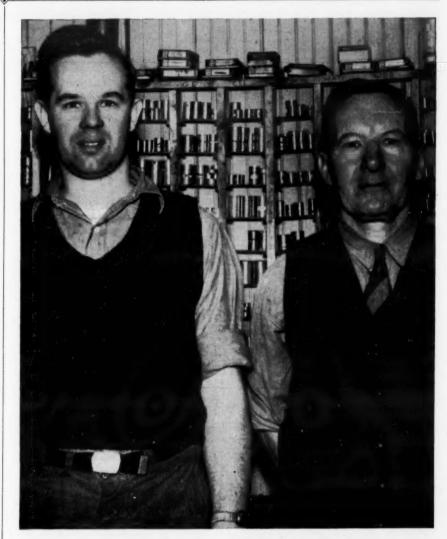
Lindahl and Rebel have worked closely together for over 17 years, both in export and domestic sales. Rebel is known in commercial refrigerator circles as an experienced export manager.

Lindahl joined Super-Cold immediately after completing his educa-

tion. One of his first assignments for that firm was in Manila, P. I., where he was introduced to exporting of commercial refrigerators. Later he served in India, Africa, Mexico, and other parts of its export fields. It was after completing these foreign assignments that he returned to Los Angeles to join the sales department.

Stephens was one of the first persons associated with selling Warren equipment shortly after its manufacture was introduced to the West.

The Warren Co. is now in its sixty-ninth year in the commercial refrigerator industry.



Electrical Motor Repair Company Urges Consumers to Specify Klixon-Protected Appliances

SCHENECTADY, N. Y.: The father-and-son team of Edward Gralow Senior and Junior, progressive operators of the Gray Electric Company, are emphatic on the value of Klixon motor protection.

"We repair all makes and sizes of electric appliance motors. At least 90% of the unprotected motors that come to us are burned-out and need rewinding. On the other hand, a burned-out protected motor is a rarity in our shop. We believe that people can save many dollars in repair costs if they specify Klixon-Protected motors in the appliances they buy."



Ranco Replacement Reference No. 1244

hrough your Ranco wholesaler.

COOL OFF... there are 8 Ranco replacement controls especially designed for water cooler installations.

Don't worry about finding the right replacement for Water Coolers. Ranco makes it! In fact, there are eight precision-built models designed for accuracy and trouble-free performance. Ranco controls put the "cool" in cooler

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

... eliminate costly call-backs, assure customer satisfaction, and provide greater profits. Why shop all over town when one stop at your Ranco wholesaler's will do the trick. See him today and replace it right with Ranco.





KOD 136 Controls for Water Coolers

Klixon Protectors Prevent Motor Burnouts in Electrical Appliances

The Klixon Protectors illustrated are built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer-preference, reduced

as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer-preference, reduced service calls and minimized repairs and replacements, it will pay you well to request equipment that has Klixon-Protected motors.



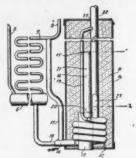
SPENCER THERMOSTAT

Division of Metals & Controls Corp. 2406 Forest St., Attleboro, Mass.

PATENTS

Week of January 16 (Continued)

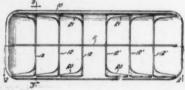
2,538,058. ABSORPTION REFRIGERA-TION. Per Paul Sixten Bror Strandberg, Stockholm, Sweden, assignor to Aktiebola-get Elektrolux, Stockholm, Sweden.



1. In an absorption refrigeration system of the type operable with inert gas, a vapor expulsion unit comprising a vertically extending conduit for maintaining a column of downwardly flowing absorption solution therein and having an intermediate section above the bottom and below the top of the liquid column there-in, a supply pipe having a lower part in heat exchange relation with the lower part of the conduit and an upper part con-stituting a vapor lift pump connected to the conduit above the liquid level therein, said vapor lift pump having a heat receiving and vapor forming part disposed in its entirety exteriorly of the intermediate section of said conduit, a heating element having a heat conducting portion coextentions with the intermediate section. sive with the intermediate section of the conduit only and arranged in heat ex-change relation with the conduit and heat change relation with the conduit and heat receiving and vapor forming part of the pump, respectively, said heat receiving and vapor forming part comprising hollow tubing providing an unobstructed fluid passage which is defined solely by the inner wall surface of the tubing and in which vapor cannot freely pass liquid, and a single body of insulating material in which the conduit, supply pipe and pump tube are embedded to minimize the transfer of heat from said intermediate section whereby solution and vapour leaving the heated intermediate section are cooled by heat exchange with solution colder than the solution in the heated section, the lower parts of said supply pipe and said conduit which are in heat exchange relation being constructed and exchange relation being constructed and arranged so that vapor in all regions of such lower parts vents upwardly there-from to said vapor lift pump and inter-mediate section of said conduit, respec-tively.

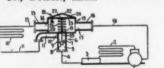
Week of January 23

2,538,939. ICE TRAY GRID. Robert Lay Iallock, Larchmont, N. Y.



 An ice tray grid having a center wall intersecting a series of flexible cross walls each with a pair of projections at its outer top edges and projecting in a di-rection generally parallel to the center rection generally parallel to the center wall, the pair of projections on each cross wall being directly opposite each other and having upstanding finger hold portions so that each pair can be squeezed toward the center wall to warp its associated cross wall to release ice adhering thereto.

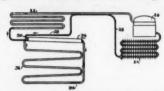
THERMOSTATIC EXPAN-VALVE. Earnest J. Dillman, De-Mich., assignor to Detroit Lubri-Co., Detroit, Mich.



1. In a thermostatic expansion valve, a

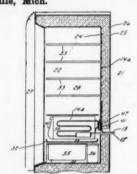
suction line casing having an outlet for flow of vaporized refrigerant there-through, temperature responsive valve operating means in heat exchange relation with said casing, a valve casing having an outlet port and in heat exchange relation with said suction line casing so that refrigerant flowing through said valve casing will abstract heat from said operating means, and a conduit leading from said outlet port and extending from said valve casing in heat exchange relation with said operating means for increasing the abstraction of heat from said operating means.

2,539,099, REFRIGERATING APPARA TUS. Lawrence A. Philipp, Detroit, Mich., assignor to Nash-Kelvinator Corp.



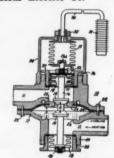
1. In a heat exchange device for the transfer of heat from a secondary refrigerating system to a primary refrigerating system comprising, a refrigerant conduit having an enlarged flow capacity conduit having an enlarged flow capacity portion, said enlarged portion being inclined longtudinally at an angle closer to the horizontal than to the vertical, a groove in the outer surface of said enlarged portion inclined in a direction corresponding to the inclination of said enlarged, and a second refrigerant conduit having a portion thereof engaging said enlarged portion in said groove.

2,539,105. TWO-TEMPERATURE RE-FRIGERATOR. Homer E. Rosebrook, Greenville, Mich., assignor, by mesne as-signments, to Gibson Refrigerator Co., Greenville, Mich.



1. In a mechanical refrigerator includ-1. In a mechanical refrigerator including an insulated storage chamber divided into an upper cooling compartment and a lower freezing compartment by a shelf, a metallic sheet defining one wall of the cooling compartment, an evaporator section mounted upon the back side of said sheet to form therewith a cooling unit to refrigerate the cooling compartment, a second evaporator section disposed within the freezing compartment to form a in the freezing compartment to form a freezing unit to refrigerate the latter compartment, and a drip deflector associated with said units to direct the moisture which drips from the cooling unit onto the freezing unit.

2,539,194. REVERSE PLOW RESPON-SIVE AUTOMATIC REVERSE MODU-LATION VALVE SYSTEM. William L. Knaus, Upper Montclair, W. J., assignor to General Electric Co.

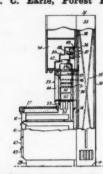


14. An air conditioning system comprising a heat exchange tube, valve means for controlling the passage of heat exchange fluid through said tube, means for passing a heating fluid in one direction through said tube and valve means, means for passing a colling fluid in the means for passing a cooling fluid in the opposite direction through said tube and valve means, means including a thermostat in the conditioned space for opening and closing said valve means, and means responsive to the direction of flow of fluid through said valve means and tube for causing said thermostat to adjust said valve means to supply, more fluid to said tube upon a rise in temperature

when a cooling fluid is passed there-through, and for causing said thermostat to adjust said valve means to supply less fluid to said tube upon a rise in tempera-ture when a heating fluid is passed there-through

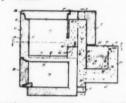
Week of January 30

2,539,613. L-SHAPED REPRIGERATOR. Guyon L. C. Earle, Forest Hills, N. Y.



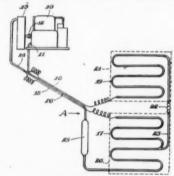
1. A mechanical refrigerator and cabinet unit comprising a lower or base cabi-net with insulated walls and a plurality of drawers therein, an intermediate setback cabinet positioned above and to the rear of said base cabinet, a table-top member above the portion of said base member above the portion of said base cabinet in front of said intermediate cabinet, an upper cabinet above said intermediate cabinet, and a refrigerator unit for cooling said base cabinet and said intermediate cabinet, at least a portion of said refrigerating unit being positioned in said upper cabinet.

2,539,813. REFRIGERATING APPARA-TUS AND METHOD. Lawrence E. Carson, Calif.



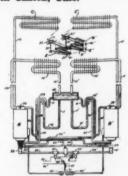
Refrigerating apparatus comprising a Refrigerating apparatus comprising a storage compartment, a hooded housing spaced therefrom, a refrigerating coil in the housing, an air duct connecting the hooded housing and the storage compartment, and an air return duct connecting said compartment and housing, said ducts extending upwardly from the housing at points substantially beneath the level of the coil and being reversed in direction to extend downwardly to points adjacent the lower portion of the compartment.

908. MULTIPLE TEMPERATURE REFRIGERATING SYSTEM. John C. Jenkins, Minneapolis, Minn., assignor to Seeger Refrigerator Co., St. Paul, Minn.



 A refrigerating system including a refrigerant circulating means, a condens-ing means for condensing the refrigerant, ing means for condensing the refrigerant, a pair of capillary tubes connected to said condenser to receive liquid refrigerant therefrom, a pair of evaporator coils connected to said capillary tubes, the end of one of said coils connected to a midpoint of the other coil, a common return line from the end of said other coil to the refrigerant connected to said other coil to the refrigerant circulating means, and a pressure differential valve between the end of said one coil and the mid-point of said other coil.

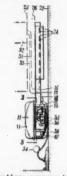
2,539,986. COOLING SYSTEM FOR RE-FRIGERATORS. George A. Brace, High-land Park, Ill., assignor to The Hoover Co., North Canton, Ohio.



1. Refrigerating apparatus comprising a pair of intermittent absorption refrig-erating systems each including a genera-tor-absorber and a cooling element in heat exchange relation with the generator-absorber, means for heating said gen-erator-absorbers, means for controlling said heating means to heat said genera-tor-absorbers alternately with respect to each other, a cooling system including a pair of conduits each having an in-verted U-shaped part adapted to form a cooling medium flow preventing vapor a cooling medium flow preventing vapor lock when heated, each of said cooling elements being connected to a separate one of said conduits to receive cooling medium therefrom, means for heating the upper part of each of said U-shaped conduits when the generator-absorber to which it controls cooling medium flow is heated, and a pair of elongated dead ended conduits connected to receive liquid cooling medium from said cooling system, each of said conduits having a portion in heat exchange relation with a separate one of said U-shaped conduits and its dead ended portion positioned to be dead ended portion positioned to be heated simultaneously with the genera-tor-absorber to which cooling medium

is supplied through the other of said

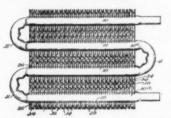
2,540,062. HERMETIC REFRIGERANT COMPRESSOR. Jens Touborg, Tecumseh,



3. Refrigeration apparatus comprising a hermetic compressor having a substantially cylindrical casing of less axial depth than the diameter thereof, a motor and compressor assembly resiliently mounted within the casing, motor lead terminals extending through the arcuate wall of the casing at one side thereof, diametrically opposed webs connected to said arcuate wall and having angularly disposed mounting flanges extending outwardly therefrom, one of said webs being perforated to receive said terminals, supporting columns connected to said web flanges, said column connected to said web perforated web also being perforated to perforated web also being perforated to receive said terminals, said perforated column being formed with outwardly extending spaced flanges partially enclosing said terminals, and cover means adapted to be positioned between said flanges further to enclose said terminals.

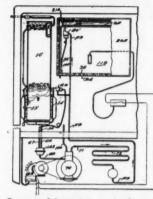
Week of February 6

2,540,339. HEAT EXCHANGE UNIT. Richard W. Kritzer, Chicago, Ill.



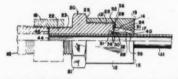
heat transfer unit, comprising: a 3. A heat transfer unit, comprising: a coil of tubing including longitudinally extending reaches and a return bend, and series of alternately arranged cross-fins provided with slots for the side-entry of the coil and apertures into which the tubing is expanded for transversely interlocking the fins and coils, one series of fins being substantially flat and the other series having integral resilient twisted tongues along their edges projecting transversely from both faces of the fins of such other series and extending be-tween said flat fins, for spacing the fins.

2.540.343. REFRIGERATING MECHAN. ISM. Glenn Muffly, Springfield, Ohio.



In a refrigerator, a tank containing 1. In a refrigerator, a tank containing a freezable material for storing refrigerating effect, a refrigerating system including an evaporator located in part on an outside wall of said tank and in part inside of said tank, and means for cooling said evaporator progressively, first in said outside part and then in said inside part

2,540,368. FLARELESS TUBE AND PIPE COUPLING. Hiram B. Harding, Baltimore, Md., assignor of fifty per cent to Harry E. Karr, Baltimore County, Md., and twenty-five per cent to Logan C. Harding, Hopewell, Va.



1. A coupling for connecting a threaded pipe with an aligned, spaced, unthreaded pipe with an aligned, spaced, unthreaded metallic tubing, comprising a union member having a nut element substantially midway of its length and integral therewith, a threaded nipple element on one side of said nut element adapted to abut the threaded end of the pipe and a threaded nipple element on the opposite side of said nut element, said union member having a cylindrical opening, lengthwise thereof, adapted to receive the unthreaded tubing, means for securing the threaded end of the pipe to the adjoining threaded nipple element comprising an threaded nipple element comprising an internally threaded coupling, and means for securing the unthreaded tubing to said union, said means comprising a hollow shell threaded to the other threaded nipple element, and a contractible member between said shell and the tubing adapted to bite into said metallic tubing.

(To Be Continued)

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RATES for all other classifications \$7.50 Limit 50 words. 15¢ per

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order:

POSITIONS AVAILABLE

SALES ENGINEER wanted: Well established Carrier distributor in the booming city of Tulsa, Oklahoma, has opening for an air conditioning sales engineer with minimum three years' experience. Excel-lent permanent position for qualified per-son. Write to Russell L. Sigler, c/o WEATHERMAKERS CO., 315 North Elwood, P. O. Box 416, Tulsa, Oklahoma.

HUSSMANN DISTRIBUTOR needs two thoroughly experienced and energetic salesmen. Must be able to layout and figure complete store installations. Salary, expense, and commission. Excellent op-portunity for top earnings and advance-ment with growing company. Give com-plete details, experience and volume sold. All replies confidential. ZEROZONE HOUSTON COMPANY, INC. 1120 Wood Street, Houston, Texas.

DESIGN-DEVELOPMENT engineer. Middle West manufacturer of control valves and accessory equipment. Experience in refrigeration engineering or design-development of electrical-mechanical control devices required. Fascinating field offers opportunity for man with ambition and ini-tiative. Please submit data re. age, edu-cation, experience, earnings, etc. in first letter. All replies confidential. BOX 3736, Air Conditioning & Refrigeration

AIR CONDITIONING closer wanted: We are a 23-year-old leader in the field, dis-tributing Chrysler Airtemp in Brooklyn, N. Y. with equipment on hand for imme-N. Y. with equipment on hand for immediate delivery, fully staffed and equipped. Our program supplies you with qualified leads—you do no canvassing. To a capable closer with "packaged unit" experience we offer a permanent future with an excellent starting salary plus that should mean a 5 figure income. Write full details to BOX 3787, Air Conditioning & Refrigeration News. & Refrigeration News

EQUIPMENT FOR SALE

COMPRESSOR BODIES, brand new; model #19 good up to 1-HP, @ \$38.; includes flywheel and service valve. The last of a large quantity. Also standard brand temperature control, \$3.85. Pressure control, \$5.00. Write for full particulars. First come, first served. MANN REFRIGERATION SUPPLY CO., 15 Astor Place. NYC. CREMENTY, 2,8000. Place, NYC, GRamercy 3-8000.

4-HP open and sealed type prominent brands condensing units complete; brand new; limited quantity; act now; \$52. each FOB New York; write for specifications; other sizes also available; MANN REFRIGERATION SUPPLY CO., 15 Astor Place, New York 3, N. Y. ALL NEW in original crates—air and water combination condensers made by Heat-X-Changer Co.: 7 Model ACW33—½ Hp.; 76 Model AWC50—½ Hp.; 22 Model AWC75—¾ Hp.; 38 Model AWC100—1 Hp.; 1 Model AWC200—2 Hp. Remote condensers: 13—RAWC75—¾ Hp.; 12—RAWC100—1 Hp.; 6—RAWC150—1½ Hp.; 1—RAWC300—3 Hp.; 1—3-ton self-contained Trane air conditioning unit in original crate. Orders for all or part of above will be accepted. THE S. J. O'BRIEN SALES CORP., 560 West 34th Street, New York, N. Y.

M-H POLARTRON temp. controls type L-480-B range 0° to 50° F. 5′ tube quan. 105, also L-480-B range +30° to 70° F. 5′ 105, also L-480-B range +30° to 70° F. 5′ tube quan. 165, M-H Polartron low temp. L-480-B -20° to +20° 5′ tube quan. 155, also high pressure controls P-422-B & P-422-A 100 lb. to 240 lb. with manual reset quan. 180, Mueller 3-way shut-off valves ½″ °O.D. sweat & %″ °O.D. sweat, heavy type packless 150 Write for prices. R. & R. EQUIP. CO., 2724 3rd Ave., New York 54.

FOR SALE—One 20-ton Worthington ammonia compressor with 30 h.p. motor-starting switches—condenser—brine cooler brine pumps-6600 lin. ft. excellent condition; 2" galvanized after fabrication brine coils—brine tank and all the appurtenances thereto. Plant still operating. Must be sold soon and removed. Also one 500 GPM Peerless deep well turbine—switches—100 ft. of column—complete with several house pumps and float switches and appurtenances. Equipment used in brewery and cheese plant. FREDERICK G. SMITH & CO., 327 E. Stephenson Street, Freeport, Illinois.

FOR SALE-while they last-standard FOR SALE—while they last—standard makes—new hermetic units—static & fancooled cond. %. %, %, %, %, . Open Units—%—%—%—%—. Relays—%—%—%—. 1/2—also overload protectors. #673 Methyl T.X.V. Capacitors in jet-black steel case 190-240 mfd. Small hermetic driers. %" fi.—7%" overall Driers. Household Cold Control—w/Knob & plate. Also other parts and supplies. Send for our latest list and prices. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln Ave., Chicago, Ill.

MISCELLANEOUS

NORGE SEALED units remanufactured and exchanged. Immediate delivery from stock, 1 year warranty. Write for prices stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, \$1.15 plus postage. MODERN REFRIGERATION CO., INC., 12541 E. McNichols Road, Detroit 5,

NORGE SEALED units—remanufactured and exchanged. All SO₂ units converted to "Freon-12." Factory methods are used, and all work is supervised by Norge factory trained men. For additional infor-mation and prices write NORD HERME-TIC COMPANY, 1701 San Leandro Blvd., San Leandro, California.

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Receive the greatest trade paper in the Industry-AIR CONDITIONING & REFRIGERATION NEWS. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning. home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

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DPA Outlines 4-Point Program To Aid Small Business Get More Defense Work

WASHINGTON, D. C. - A fourpoint procurement policy to increase participation of small business in defense production was announced by the Defense Production Administration recently.

The four points are:

1. To bring into the defense effort on a prime contract, subcontract, or purchase part basis every qualified producer who can be used so that orders can be spread across as wide a base as possible.

2. To find and put to use the productive facilities of small firms.

3. To give small manufacturers all necessary information concerning government needs and the steps they should follow in obtaining subcontracts as well as prime contracts.

4. To develop and install procurement procedures which will encourage prime contractors to subcontract to small firms the maximum amount of business possible.

To carry out this policy, the following steps have been recommended to all government defense procurement agencies:

1. Contracting officers should require contractors to state in bid or negotiation whether or not additional facilities, either buildings or equipment, will be necessary to accomplish the work.

2. Each service should review its requirements and designate specific items suited for distribution among a number of contractors.

3. Contracting officers should obtain agreement with suppliers that subcontracting will be used wherever possible.

4. Prime contractors should be provided with incentives to subcontract to the maximum degree possible. 5. The Department of Defense

Robert L. Day Appointed Factory Sales Engineer For General Controls

GLENDALE, Calif.-General Controls Co. has announced the appointment of Robert L. Day as a factory sales engineer.



Day, who will headquartered the Glendale plant, spent the last year as senior sales engineer in the San Francisco factory branch

In his new job, will assist branch office personnel by dling technical in-

quiries from customers concerning heating, industrial, and refrigeration controls made by the company, according to J. F. Ray, vice president in charge of sales.

Day attended the University of California and the University of Southern California, where he studied special courses in engineering. From 1934 to 1936 he was in the States Army Air Corps, serving as an instructor in instrument flying.

During World War II, Day was associated first with Aircraft Accessories Corp., as a liaison engineer. and then with the Aerojet Engineering Corp., where he was a production engineer on jets and missiles. He also has been associated with the Southern California Gas Co. as well as with the James Graham Mfg.

DISTRIBUTOR

Farm and home freezers, commercial display cabinets, dairy cases, bottle coolers, walk-in coolers

Profit by selling the American "Aristocrat" line

AMERICAN REFRIGERATION CORPORATION

> 1025 E. Excelsion Avenue Hopkins, Minnesota

should authorize payment of justifiable price differentials to accomplish the objective of keeping intact the facilities of small business

6. The Department of Defense should review its "M-Day Production Allocation Program" with a view to broadening, wherever possible, the number of eligible contrac-

7. Defense Production Administration, National Production Authority. the Department of Defense, and all production and procurement agencies should continue existing programs of technical aids, production services, and contracting and subcontracting assistance to small business.

8. These agencies should undertake a coordinated program of information concerning the basic objectives of small business participation in defense production and the means, by which this program can be accomplished.



New Idea for Vegetable Case

RIGHT: Tyler Fixture Corp. believes this is the first refrigerated vegetable case to be designed for rear loading. It has forced air circulation and is available in 8 and 12-ft. lengths. Here Geo. "Sparky" Miller of Tyler demonstrates its advantages for John Roberts and Donald Everhardt of F. W. Albreckt Co., Akron, Ohio market operator.

Cool Comfort for Supermarkets

LEFT: Comfortably cool, Jo York, Chicago model, poses beside the 10-ton "zone control" package air conditioner displayed at the Super Market Institute show in Chicago by Typhoon Air Conditioning Co. Claimed to be only 4 in. wider than conventional 5-ton units, this conditioner also has a six-row coil, both factors making it ideal for supermarkets, according to Typhoon.



The Factory that grew out of a toolbox!

The industrial world is dotted with manufacturing plants, large and small, which had their original beginnings in a man with an idea . . . and a toolbox.

Many an industrial success dates back to a setting of toolboxes, dinner buckets, overalls, long working hours . . . and men too preoccupied with perfecting their ideas to take time out to shave.

In the magnificent development of refrigeration and air conditioning interesting stories of success are plentiful. Every progressive company can . . . when the occasion is appropriate . . . "point with pride" to achievements in its own background. Somewhere along the line it has done something to justify its existence and to merit its survival in a highly competitive field.

It might be the development of a product, a better production method, or the improvement of service . . . perhaps a superior marketing plan, a new sales angle.

With these memorable ideas in view-and celebrating 25 years of distinguished service to the industry—the editors of Air Conditioning & Refrigeration News on September 17, will present:

THE SILVER ANNIVERSARY ISSUE!

This Anniversary Issue will salute the men, companies, products, achievements and developments which have built the refrigeration and air conditioning industry during the past quarter century.

It is fitting and appropriate on this occasion that advertisers take advantage of a rare opportunity to relate in detail their own progress and developments and contributions to the growth of the industry.

Advertising deadline for this once-in-a-lifetime Special Issue is September 7.

Air Conditioning & Refrigeration News

The Newspaper of the Industry

ASRE Papers Cover Variety of Subjects--

(Concluded from Page 1, Column 4) tournament. In the latter J. W. Stevens won the Wolverine cup with low gross; Tyler Riggin the Kelvinator cup for low net; and Stevens teamed up with R. A. Baker to take the Lake Erie trophy for the low net for sections, representing the Central New York section.

Two technical papers devoted to small air conditioning systems aroused considerable discussion following their presentation by D. D. Wile, chief engineer of Refrigerating Engineering, Inc., Los Angeles, and William T. Smith, who heads the refrigeration section for the U.S. Air Force.

AIR FORCE MAY ASK FOR SPECIAL HUMIDITY CONTROL

Shortcomings of conventional small systems in trying to maintain comfort conditions during mild but humid weather were outlined by Wile. He suggested that a combination of face and by-pass dampers in conjunction with dual compressors or some other arrangement of capacity unloading would be an ideal system permitting the smaller air conditioners to reduce humidity while operating at less than peak capacity.

Similarly, Smith cited the need for humidity control in smaller systems and indicated that such control may be required in conditioner specifications to be set up by the Air Force. Smith's solution to the problem, however, would be to provide a reheat coil warmed by condenser discharge water.

W. E. Dodson of General Electric compared present package air conditioning units to the early cars.

"The Model T had no self-starter. just as most room units today have no thermostats," he said.

REHEATING AN ANSWER?

Likewise, he declared, the early open-type cars which could hardly be driven in winter might be compared to air conditioners without reheating equipment.

If a demand develops for these refinements they may become standard equipment, he pointed out, emphasizing, as did the speakers and others, that economic considerations cannot be overlooked in this problem.

E. R. Michel, assistant manager of the air conditioning and refrigeration division of Worthington Pump & Machinery Corp., advised refrigerating engineers not to "jump to conclusions as to the refrigerant, type of compressor, or cycle to be used" in achieving low temperatures.

He said that a study of all the various methods of obtaining low temperatures "may bring up one that is cheaper, more economical to operate, more simple to apply, or more reliable in operation."

He reviewed the methods, refrig-

erants, and equipment available and pointed out that ammonia is still perhaps the most efficient refrigerant and is quite commonly used for temperatures down to -85° F. He noted that ammonia is very practical from the initial cost and performance standpoints and is easily handled in direct expansion systems.

He declared that the hydrocarbon refrigerants are still the only practical means of obtaining temperatures much below -100° F.

STORAGE OF CONCENTRATES

Clarence W. DuBois of the Minute Maid Corp. discussed a series of tests conducted during 1950 to show what effect various storage temperatures had upon citrus juice concentrates, particularly in relation to flavor.

The official report on these tests has not yet been published as it is still awaiting approval by U. S. Department of Agriculture officials.

DuBois pointed out that there is a definite relationship between temperature and "cloud" retention (lack of separation of the elements of the reconstituted juice). He said that cloud change precedes by a considerable time any reduction in flavor.

He declared that retention of at least 75% of cloud is considered necessary to give the juice a satisfactory appearance to the consumer. Storage temperatures of 0° F. have produced no loss of cloud at the end of 330 days. At 15° F., 75% of cloud can be retained for up to 100 days.

No deterioration in flavor was noted after 204 days when the concentrate was stored at 0° F., but at F. significant deterioration occurred after 175 days.

He emphasized that results of temperature variations are not reversible and that flavor once lost cannot be regained by reducing temperature later.

H. C. Diehl, director of the Refrigeration Research Foundation, criticized DuBois' paper for not providing data for short term storage.

He believed that the real need for such low temperatures for short term handling should be determined before the service trades should be asked to provide them.

CHAMPIONS HIGH-SPEED UNITS

Leon Buehler, Jr., chief refrigerating engineer for the Creamery Package Mfg. Co., outlined the advantages of using multicylinder high speed ammonia compressors and refuted some theories about high speed machines that he felt did not apply particularly to the multicylinder ammonia compressor.

He argued that multicylinder machines, operating at a piston speed of 700 f.p.m., do not show any abnormal wear and that it is fallacious to run machines at greatly reduced speeds just so that they will last

longer. The real object, he said, is to operate the machine at the lowest cost per ton of refrigeration.

He cited these advantages for the high speed machine: Lighter weight, good running balance, smaller floor space required, lower head room, ability to connect to relatively inexpensive induction motors, unloaded starting, simple design, lower cost.

At the Domestic Engineering Conference chairmanned by Milton Kalischer of Westinghouse, household engineers heard F. H. Fleischer and J. B. Brightman of General Electric discuss motor design and application problems, respectively, for hermetics.

Motor design, according to Fleischer, is essentially a comproaccording to mise between obtaining maximum efficiency and holding cost to a minimum, although numerous factors are involved. Accuracy in tolerances, cleanliness in manufacture, and dryness of materials are essentials.

Points stressed by Brightman included the importance of keeping motor operating temperatures low, preferably below 90° C. One reason for this, it was explained, was to prevent driving moisture out of the paper insulation in the stator.

Noise in motors, another important problem, came up for some discussion after the speakers had declared that this could be minimized by keeping the air gap at a minimum and maintaining a concentric air gap within extremely close limits. Some noise, however, is due to the motor slots, and thus cannot be eliminated.

Whether concentricity of the air gap causes noise was debated by James Hornaday of Norge who said, We have found some motors that were definitely not concentric but weren't noisy while others that were concentric were noisy."

Congress Indicates Some Sympathy for Credit Control Change

WASHINGTON, D. C .- Both the Senate Banking Committee and the House Banking and Currency Committee are hearing arguments with an apparently sympathetic ear that some change should be made in Regu-

Arguments were presented before the Senate group favoring relaxation of consumer credit terms by former Senators Scott D. Lucas for the American Finance Conference representing mainly the automotive industry, and Francis Myers for the National Foundation of Consumer Credit.

Myers argued that Regulation W has caused a curtailment of production of the goods covered at a time when it is impossible to justify this type of credit restriction.

Rep. Wright Patman of the House committee indicated that he intended to offer an amendment to the regulation that would extend the number of months to pay to 21 on automobiles and other durable goods.

Rep. Abraham Multer joined Patman in proposing that administration of the regulation be taken from the Federal Reserve Board and given to the Federal Trade Commission or split up among several agencies in order to better coordinate its use with the needs of defense.

James B. Carey, CIO official, had previously testified before the House Banking Committee that Reg. W must be relaxed so that heavy inventories of appliances can be moved.

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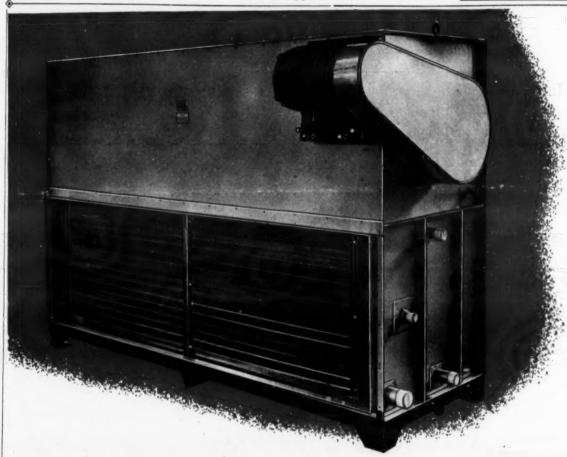
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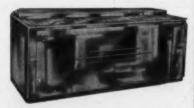
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